



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY, }
(INCORPORATED.)

Vol. XIII.

CHICAGO, ILLINOIS, MARCH 15, 1895.

No. 9. { SUBSCRIPTION PRICE,
ONE DOLLAR PER ANNUM.

AARON'S MALT HOUSE AND ELEVATOR AT SOUTH CHICAGO.

South Chicago seems destined to become a favored point with malsters as well as with grain handlers, and as the navigation of the Chicago River becomes more difficult (it surely will when the drainage canal is opened) the southern port of the city will become more popular with the grain trade. Last year three new elevators were erected at South Chicago, also the elevator and malt house of the L. J. Aaron Elevator Company, illustrated herewith, and at present another elevator and malt house is being erected near by for August Schwill. Both of these malting plants were planned by the Simpson & Robinson Company of Chicago.

The plant is located on the line of two trunk roads and near to the belt line, so has excellent rail shipping facilities. Lake Michigan is not far away but is too far to load direct to boats. The elevator is 60x142 feet and 135 feet high and has storage capacity for 325,000 bushels. Its roof is of galvanized standing seam iron, and its siding is of galvanized corrugated iron.

Power for the elevator is transmitted by manilla ropes throughout. A number of friction clutches are provided so that power can be cut off from machines or elevator heads as desired. The five elevators have an elevating capacity of 3,000 bushels each per hour, and the conveyor belt running the full length of the Texas has a capacity of 5,000 bushels per hour. It is equipped with self-moving trippers. A passenger elevator makes it easy for the operators to go to the top of the house. In the cupola are two of Howe's 1,200-bushel Hopper Scales, one Monitor Malt Separator, one Barnard & Leas Separator and one Prinz Improved Barley Grader and Cockle Machine. On the first floor are steam power grain shovels for unloading grain, Robinson's Improved Car Puller, which has a capacity of pulling 12 loaded cars, and a 40-ton Howe Track Scale.

The house has 37 bins; 23 are hopper bottom bins

12x14x50 feet deep, and 14 are flat bottom bins 14x24 and 60 feet deep. The elevator is fairly well equipped with apparatus for extinguishing fires. It has a stand-pipe and five automatic reels with 50 feet of 2½-inch hose on each.

The malt house adjoining is constructed of brick and equipped throughout with machinery made by the A. Plamondon Mfg. Co. of Chicago. The power plant is equipped with two Corliss Engines of 90

SALE OF GRAIN BY SAMPLE AT MILWAUKEE.

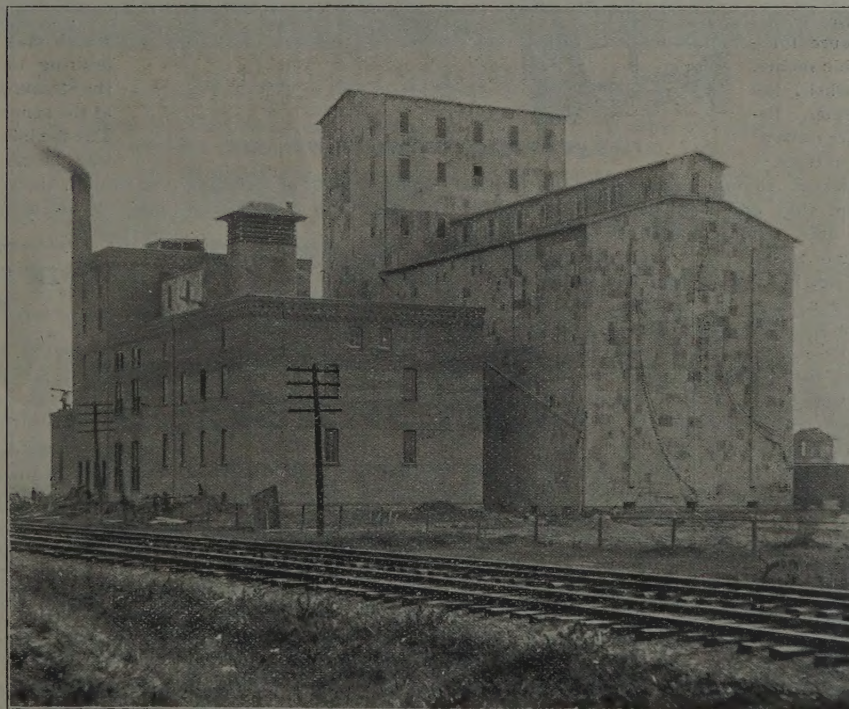
BY M. S. LOWRY.

Grain of all kinds is sold by sample to such large extent in Milwaukee that it is very important that it be thoroughly mixed when being loaded for shipment, so that it will be entirely alike through the car. It is a common impression on the part of shippers that if grain is run over two or three times it must necessarily become thoroughly mixed. It is often found, however, that when this has been done the grain is uneven in quality, having manifestly run over in layers, which have only been reversed by handling. Mixing can only be effected by running separate streams together or by shoveling the grain over.

When grain is sold by sample if there is any variation in quality from the sample sold by, the buyer rejects it; or he may take such portion of the grain as is equal to or better than the sample and reject the remainder. In case the market advances pending delivery, the buyer demands the fulfillment of the contract by the delivery of the specified quantity of grain equal to the sample sold by, and the seller is held liable to any loss arising from procuring and delivering it; or if the buyer can make use of the grain tendered a settlement may be effected by making a suitable reduction on the price sold at to cover the difference in value. The buyer cannot be compelled, however,

to accept anything different from what he contracted for, even at an allowance for difference in quality; and hence, if the market declines pending delivery the grain is liable to be refused entirely if not equal to sample, and it has to be resold. The loss from the decline in the market falls wholly upon the shipper, besides the expense for demurrage arising from detention of car.

In case of dispute between the buyer and seller as to whether the grain is equal to sample, the grain inspector of the Chamber of Commerce is called upon to inspect it by sample, and if pronounced by him



AARON'S MALT HOUSE AND ELEVATOR AT SOUTH CHICAGO.

and 60 horse power respectively. The boiler room adjoins.

The malt house as well as the elevator was erected on a time contract by the well-known elevator builders, Simpson & Robinson Company, who make a specialty of quick work.

There are 250,000 tons of wheat in Port Costa warehouses at San Francisco with an invisible owner. It is thought by some to belong to the estate of the late J. G. Fair, but those who ought to know deny that such is the case. Part of the wheat is weevilly.

equal to the sample sold by, the buyer is compelled to accept it. Should the latter refuse to do so, the grain is sold for his account, and he is held liable for any loss resulting therefrom.

It is difficult, even with the utmost care, to obtain a true average sample of a carload of grain that varies in quality, as it is impossible to determine, even approximately, the proportion of each quality contained in the car. The sample is as liable to be below the average quality as above, and in the former case the grain would necessarily be sold below its true value and delivered without the variation in quality being discovered by the seller. A variation in this direction would very rarely be reported by the buyer.

THE BUSHEL AND THE CENTAL.

BY F. R. PROGRESS.

A pound's a pound
The world around.

In early times, when the requirements of mankind were fewer and simpler than now, commercial intercourse between nations was rare, and was often limited by a mountain or a river. The exchange of commodities that took place among the members of one tribe was carried on with the simplest measures, and in accordance with custom. Commercial intercourse has broadened since then, but the instrumentalities of exchanges have not kept pace with its growth. The time is past when feudal princes tinkered with the weights and measures of a country as they pleased, but the complicated system of Troy weight, avoirdupois weight, dry measure, liquid measure, etc., which they concocted, is still with us.

The United States brought its measures and weights from England. In England an inch was determined by the dimension of "three barley corns," a penny was to weigh 32 wheat corns plucked from the midst of the ear; 20 pennies was to make an ounce, 12 ounces one pound, 8 pounds a gallon of wine, 8 gallons of wine a London bushel, which was one-eighth of a quarter. However, the bushel measure was placed on a more secure foundation later, being made 2,218.192 cubic inches, which equals 1.0315 Winchester bushels, the unit of measurement in the United States. Besides this England has 300 or 400 other units of measure to facilitate commercial transactions.

The use of commerce is to transport commodities from parts of the earth where they are in abundance to parts where they are wanting. Whatever hinders this transportation or renders the interchange difficult or dangerous is detrimental to commerce, whether it is a mountain or a river, or a Sahara of weights and measures. How does the system now in use in England meet the requirements of modern commerce? A grain merchant in Liverpool had a cargo of wheat. Parts of it were bought by five different persons. The cargo had to be sold in five different bushels; in paying the duty these bushels had to be converted into imperial quarters; in calculating tonnage and other dues it was necessary to reduce all to tons.

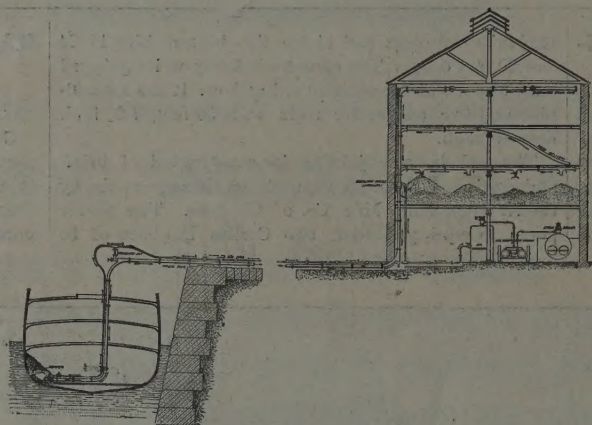
No two countries have the same weights and measures, and the same name is often employed to designate different quantities. The United States lost many of the delectable features of the English measures, but adopted others equally as good. While the currency is on the decimal system, which is acknowledged to be the best in operation, we have contentedly adhered to the antiquated scale of weights and measures with which trade has for so long been embarrassed. For the ordinary purposes of retail trade this is all right. We have no quarrel with the grocer. No one wants the "good old *metrique* system of France." The difficulties of establishing it would be almost insurmountable.

But to carry on such a business as grain dealing the bushel as a unit of measurement is inadequate to the requirements of commerce, international or interstate. An examination of the different weights of the bushel of grain in the United States shows a curious state of affairs. Throughout the states the weight of a bushel of wheat is fixed by law at 60 pounds, but the measured bushel actually weighs all the way from 40 to 60

and to 64 and 66 pounds. However, this measurement is comparatively and exceptionally uniform. There are 54 pounds to the bushel of rye in California and Louisiana, 56 pounds in all other states except in South Carolina, where it weighs 60 pounds. There are only 26 pounds to the bushel of oats in Maryland, 36 in Washington. In South Carolina there are 60 pounds of barley to the bushel, in Georgia there are 47 pounds. This uniform diversity exists throughout the whole list.

This state of things might lead to some confusion. For instance, 1,000 bushels of rye bought in Kansas (where it weighs 56 pounds to the bushel) and shipped to New Orleans would become 1,750 bushels there, where a contract for delivery would be settled for at the rate of 54 pounds to the bushel were it not for an agreement to the contrary. In the case of barley 1,000 bushels bought in Kansas at 48 pounds to the bushel would become 1,500 bushels in New Orleans. If 100,000 bushels of oats are shipped from Washington to Duluth, Minn., they become at their destination 112,500 bushels.

Of course an agreement between shipper and buyer obviates some of the confusion, and as a general rule these weights fixed by law are declared to be intended only as standards of reference in the absence of any express agreement. But suppose a law should be passed which made unlawful this option of special contract? In 1874 the Maine Legislature fixed the weight of a bushel of apples at 44 pounds and forbade



PLAN OF AN ATMOSPHERIC GRAIN ELEVATOR.

agreement to the contrary under penalty of forfeiting 25 cents to each bushel. In Wisconsin a bushel of apples weighs 57 pounds.

An American asks for a fair field and no favors, but he does not find it here. I will mention two more examples of the beauties of our bushel measure. In Salem County, New Jersey, the weight of a bushel of corn was fixed at 55 pounds, in the rest of the state it weighed 56 pounds. There is a law in Indiana fixing the weight of a bushel of mineral coal at 70 pounds if mined in the state, at 80 pounds if mined outside and sold in the state.

Such a chaotic state of affairs is a hindrance to commerce. The time has come for the grain trade to abandon the bushel, for it has become a useless instrument in our transactions. Some may raise the objection that as the various weights and measures now existing are the natural growth of the necessities of traffic, and as they are founded on experience, they are likely to be better adapted to practical commercial purposes than any changes to systems founded on theory. While this may be true for the great part of commodities which are naturally bought and sold in other than decimal proportions, nevertheless it is time, and it has even become necessary, for the grain trade to make a change.

Common use for years in the Pacific Coast states has demonstrated that the cental (100 pounds avoirdupois) is the most convenient unit at present known for carrying on the grain business. As the business is carried on at present the farmer is offered a price per bushel for his grain. The buyer receives it in pounds and reduces it to bushels; the freight is paid in pounds; it is received in the central market and reduced to bushels—just about paralleling the experience of the Liverpool grain man's shipment. The adoption of the cental or decimal system would

do away with all this. It is the simplest and easiest system, and would be the one most readily adopted by foreign countries. Prices could be easily adjusted to this standard, existing tabulations would be simplified, and it would tend toward the establishment of uniform practice throughout the world.

AN ATMOSPHERIC GRAIN ELEVATOR.

For many years men in different parts of the world have been experimenting with air as an agent for transmitting grain through airtight pipes, and one or two have succeeded in designing a practical system. Others bring out new systems now and then and they receive some attention for a short time then disappear. One brought out in London some time ago is the Improved Patent Atmospheric Grain Elevator made by the Atmospheric Grain Elevator Company, Limited. This company had their blast elevator at work in Birmingham for some time, where it was elevating and automatically weighing large quantities of grain.

This elevator was equipped with six pipes for elevating grain to a hopper 40 feet above the ground, where an automatic grain weighing machine registered the amount elevated. One of these pipes was designed to elevate 50 tons of grain to the scale every hour, two had an elevating capacity of 20 tons and two 15 tons, and the other one to convey grain 40 feet in a horizontal line and then elevate it to the scale hopper.

Air currents passing through the pipes conduct the grain to any desired point. On the receiving end of the pipe is a peculiarly constructed nozzle and the air passing through it sucks up the grain.

The special advantages claimed for the Atmospheric Grain Elevator Company's system are, first, the very great economy of labor in the unloading of ships as compared with any other system; second, that the apparatus cannot only be readily erected on a dock or wharf, but may also, if desired, be fixed to any steam vessel which may be brought alongside a grain ship desiring to discharge either in the middle of the stream or dock direct into barges, and will at the same time automatically weigh the grain.

The flexible pipes are easily moved so as to unload the grain from any point of the vessel. The illustration shows the system adopted by this company for unloading grain from a vessel into a mill or warehouse.

RICE IN SIAM AND AMERICAN MACHINERY.

Mr. Robert M. Boyd, the United States vice-consul at Bangkok, writing about the rice crop of Siam—one of the greatest rice-producing countries of the world—says: The cultivation of rice in Siam is carried on in the most primitive manner; indeed, no progress has been made in the past hundred years in this line. Beyond the use of the crudest of bull-tongue plows and the machinery in the rice-cleaning mills in this city, no implements or machinery of any kind is employed. Without the buffalo the Siamese rice-cultivator would be without his most important aid. This large beast is used as the motive power in front of the bull-tongue. He draws the rice from the fields after it is cut, and he is also used for threshing, being driven backward and forward over piles of rice heads. After tramping in this way some hundreds of miles he succeeds in separating, in the course of two or three months, about as much grain from the husk as a mill run by an electric hand battery would turn out in twenty-four hours. A small quantity of rice is cleaned in home-made hand-mills. This, however, is practically limited to that used for home consumption. This apparatus is of the crudest construction, and the process is not nearly so rapid as that of the buffalo method.

E. C. Buchanan & Co., grain dealers, Memphis, Tenn., write: "We subscribe for the AMERICAN ELEVATOR AND GRAIN TRADE and the *American Miller* to keep up with what is going on."

IMPROVED FACILITIES FOR SHIPPING GRAIN AT NEW ORLEANS.

The various elevator companies of the South have found their shipping facilities far too small for the growing demand of exporters, so, in order to meet the future increase, great improvements have been made along this line, calling forth the expenditure of considerable money and ingenuity.

Last spring the elevator at Westwego, La., was overhauled and equipped with a belt conveyor system for this purpose. Now the managers of the elevator at Southport, La., owned and operated by the Illinois Central Railroad Company, have made some marked improvements, tending to surpass any like method in this country. This plant is located a few miles from New Orleans, on the Mississippi River. The company, foreseeing the future demand for such facilities, have constructed a large system to handle promptly all orders that come into their possession. The railroad company has two large elevators at this point, which are located several hundred feet from the wharf along the Mississippi River. The elevators were located back from the river on account of the liability of the river to wash away its banks, which would ruin the foundations of the buildings.

These elevators are equipped with a complete outfit of the most improved grain handling machinery. The company has just completed the large belt conveyor system as illustrated in the above cut. This system of conveyors consists of two 30-inch belts extending parallel from the elevators some 600 feet to two other belts, each 400 feet long, located parallel with the wharf. The superstructure is carried on heavy trestle work, and is 100 feet above the water. The double belt house is 12x10 in the clear and inclines at an angle of about 20 degrees from the elevator, and the single belt house is 8x10 in the clear. The carrying of the galleries

so high is done to get the grain at ample height to spout into the vessels. The belts along the dock are so arranged as to load two vessels at once. The grain, as it comes from the elevators over the two 30-inch belts, is spouted onto the two longitudinal belts, which convey in opposite directions. These conveyors are equipped with the Webster Automatic Moving Trippers, of improved patterns, so that grain can be tripped off at any point to spout in different hatches of the vessel being loaded. Each longitudinal belt is equipped with a stationary and movable marine spout. The latter is handled with a power moving mechanism of unique design and travels on special track along the outside of belt galleries.

This whole arrangement is thoroughly complete and has been worked out fully in detail by the designers. It is possible to load one vessel through one or two hatches at the rate of 25,000 bushels per hour; or two vessels can be loaded at the same time at the rate of 12,500 bushels per hour through one or two hatches. This whole system has been designed with the purpose in view of losing no time in making changes from hatch to hatch of vessel while loading grain at this point.

It is also a noteworthy feature for shippers that boats loaded at this dock can be supplied with a mixed cargo of goods of such kind as is usually found in the South. Every detail was designed so that a boat can receive its full cargo without being moved from its first position. A boat can receive two kinds of grain at once, cotton, oil-cake, staves or any other goods that may be desired. These various cargoes can all be loaded at the same time without interfering with each other. The rapidity with which boats are being handled is a great advantage over other elevator plants in the South, and certainly deserves the patronage of shippers, as no time is lost in loading and the boats are detained but a short time.

This belt conveyor outfit has for its motive power a

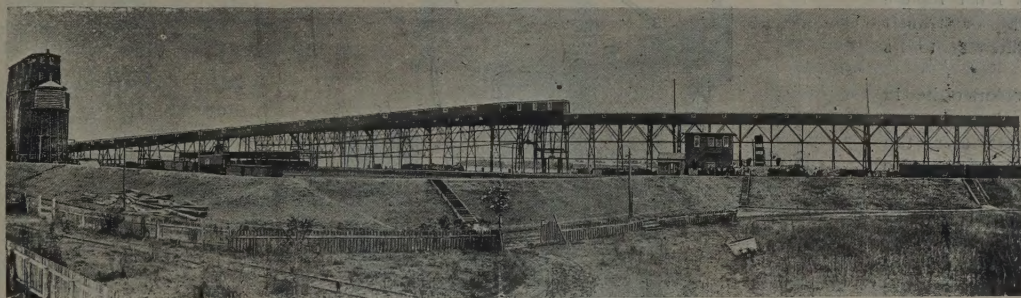
125-horse power engine of latest improved pattern. It was necessary to locate the engine some 400 feet from the junction of the belt gallery and to bring the power to its proper place by a rope transmission. This drive is carried on idlers up under the floor of the double belt gallery, and is divided at the end, giving power to two jack shafts, one for each set of belts.

The various transmissions are of 1½-inch manilla rope, well proportioned for their work, and each drive for this system is equipped with a friction clutch which is operated at the junctions of the several conveyors. At this place can be seen some of the most perfect running rope transmissions in this country. The full equipment of machinery was furnished and erected by the Webster Mfg. Co. of Chicago, Ill., who make a specialty of this line of machinery.

This improvement speaks well for the showing of the export grain trade of the South, and also for the energy and zeal of the Illinois Central Railroad Company. The system was designed and erected under the direct supervision of their master carpenter, Mr. G. F. Jenkins.

THE GRAIN WEEVIL.

It would seem that wheat is never free from one enemy or another, from the green plant to the ground flour. Among other pests, one which is well known to those who handle grain, is a small reddish brown beetle which does much mischief to stored grain. When once it gets into stored grain it calls for immediate extermination or a loss of the grain. A recent



THE CONVEYOR BELT GALLERIES AT SOUTHPORT, LA.

examination of a quantity of wheat by W. G. Johnson, Assistant State Entomologist at Champaign, Ill., showed it to be literally swarming with worms.

This insect is called the weevil. It thrives in any climate. It is found in Europe and in America from Alaska to Florida. The larvæ of the insect, as described by Mr. Johnson, when full grown are horny, brownish worms, with darker heads, about ½ inch long. Whoever has had experience with the bugs knows the importance of taking immediate steps toward exterminating them on their first appearance.

Carbon bisulphide is probably the best-known remedy for infested grain. This is a highly explosive liquid and should be used with great care. When it is used in stored grains 1½ pounds will be sufficient for each ton. It will be well to apply it several times in badly infested bins at intervals of about two weeks, as many eggs and pupæ would not be destroyed by one application. If used in empty bins or rooms one pound to 1,000 cubic feet of air space is sufficient. No time should be lost after a can of bisulphide has been opened, but the contents should be quickly scattered over the grain in the bins or set about in tin pans or other vessels, the doors and other openings tightly closed and kept closed for ten or twelve hours. This liquid can be poured directly on stored grains without any bad effects. It soon evaporates and penetrates every portion of an enclosure, killing every living creature with which it comes in contact if left for a sufficient length of time.

But however efficient may be the remedy for grain thus infested a preventive is much better. This can be accomplished to a great extent by keeping the elevator and the storage bins as clean as possible. This means a constant cleaning and sweeping, the destruction of all dirt and loose material which is liable to accumulate about an elevator. The building should be kept as well ventilated and well lighted as possible, and above all in a clean condition, the dark corners

swept out and the elevator heads and boots free from dirt.

The Assistant State Entomologist of Illinois invites grain dealers to aid him in his work with this grain pest. Any confidence reposed in him will be strictly kept.

WHY ELEVATOR MEN SHOULD HANDLE BALED HAY.

BY K. M. TURNER.

The question propounded to me quite frequently is, why do not more elevator men handle or bale hay, and I have often wondered why they allowed a crop which has an aggregate value more than any other raised by the American farmer to pass by without any effort being made to secure a revenue from it. It is quite evident, even to the casual observer, that no class of individuals is better situated to handle the hay trade than the elevator man. He is in constant touch with the principal markets of the country, his credit is established, he is thoroughly conversant with the methods in vogue with the railroad companies in regard to shipping, freight rates, weights, etc. At the season of the year when the hay crop is moved he is comparatively idle. The trade can be handled with the same capital that he has invested in his grain business and the profit to be derived, as compared to the investment, is much larger than that which his grain trade yields. The question, therefore, is a very natural one, and the only solution that I can offer is that the elevator men do not realize

the profits to be derived from the hay trade.

I remember some years ago I was buying hay in the southern part of Illinois along the line of one of the principal railroads. At each station I could find grain buyers who were ready to sell me from one to 100 carloads of corn, wheat or oats, but in order to purchase hay that was raised in the surrounding territory, I was

compelled to visit the farmers, make arrangements with them to haul the hay to the station after it was baled, and then return to the station, arrange with the railroad agent to have a sufficient number of cars at a certain time that my farmer patrons might load their own product. The elevator man in the meantime classed me as an individual of very small caliber, and if he deigned to make any note of me or my visit referred to me as "that hay buyer." In due time the portable hay press baled all the hay contracted for in my visit, the farmer loaded the hay in the cars designated by me, in his peculiar style, not knowing enough about grading to follow the instructions I gave him. Upon its arrival at destination I often found that these instructions were not obeyed, and that rather than throw a bale of hay aside because it happened to be slightly discolored, they would load it and trust to luck to have it go through. I was frequently compelled on account of this carelessness in loading to make a reduction of from \$1 to \$3 per ton in order to satisfy the customers to whom I sold the hay.

How easy it would have been for the elevator man, in the small village where this hay was loaded, to have arranged with the farmers at the time they were hauling their corn, wheat or oats, to deliver to him their hay; and when the hay was delivered how easy it would have been to inspect it and see that choice No. 1 and No. 2 hay were placed in their respective cars, and to see that each bale that had the slightest tinge of discolor was loaded in the proper car, and how easy for him to have the bales made with the same hay properly graded, and to receive from \$1 to \$2 more per ton than I could possibly allow the farmer who billed it direct.

The elevator man by all means is the man to handle the hay raised in the surrounding territory. If the profits he derived were no more than what he could realize by properly grading it before it was shipped he

would have been amply paid for the money invested and the time spent in handling it.

Strictly speaking, the elevator man in our hay-growing districts should bale the hay; he should establish a hay market, allowing the farmers to haul the hay to him loose, so that he could still better grade his hay, and after the market has been established he could educate the hay raiser as to cutting, curing and caring for hay. This in itself is, however, subject-matter for a very profitable article, and I therefore will not dwell upon it.

There are, I am informed, a few elevator men who have taken up this their legitimate business, and who find it profitable, and I firmly believe that the more the question is investigated the more stationary hay-baling plants we will find throughout the hay-raising district operated by the elevator men.

EXPERIENCE WITH AMERICAN ELEVATORS IN RUSSIA.

BY ALFRED F. BENDER, ENGINEER, ST. PETERSBURG.

In connection with the elevators of the Riasan-Uralsk Railroad it should be mentioned that the railroad company possesses warehouses also, at the stations at Korablino, Nickitino and Chruschoro, where grain is kept gratis. But these also are operated at a considerable loss.

The rules and regulations which control the business at the elevators are so complicated as to require a year's study to be understood. Not to speak of the farmers' or peasants' grain, these railway houses must handle merchant grain just bought or transit grain already sold and on the way to its terminal destination.

There are many other elevators either in course of construction or already completed in this part of the country along the Southwestern and other railways and also in Central Russia. All of them have been built by the respective municipalities with the money appropriated for public works during the recent poor crops and hard times. Reports of business transacted are still wanting in many instances, and will be until the several elevators succeed in attracting grain enough to commence operation. The economic laws being applicable to all the elevators, there is no reason why these should give better results than those heretofore described. In no instance could an elevator afford to save the peasant or farmer from the clutches of commission men and intermediate handlers in order to facilitate direct connection between the producer and consumer.

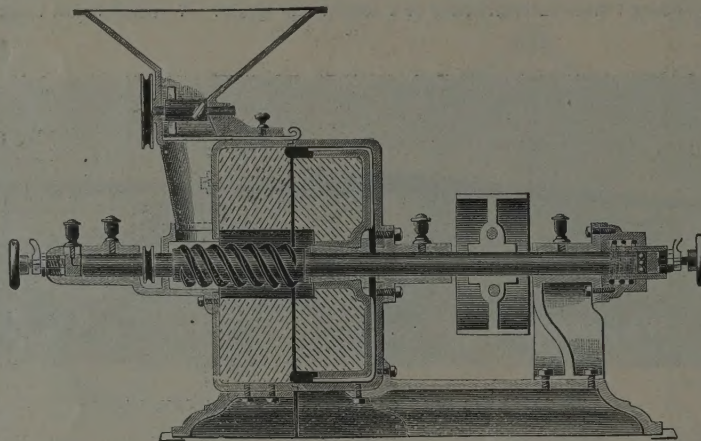
Neither at a port nor railway station does peasants' grain enter an elevator, the one at Yeletz making an exception in exclusive cases. In most cases the land owner, whose estate lies from 100 to 200 miles distant from the railway line, prefers to wait for the purchaser of his grain to pay him a visit at his estate, with a view to selling the grain on the spot, and often long before harvest is done. He is sure enough to gain by economizing on cartage, and readily agrees upon a lesser margin, being eager to get the money at once. The middle or second-class land owners are often, and the smaller ones always, in need of money, and are compelled to sell their grain as soon as (and sometimes before) it is threshed. They sometimes lose 24 to 3 cents per 36 pounds, but for want of other credits to resort to they have to do it to get the ready money when it is needed. The peasants do not avoid the elevators to the extent that the elevators try to obviate the necessity of receiving their grain. The charges and fees make it impossible for an elevator to accept small shipments of ungraded grain for storage, and the fees ought to be raised no less than 100 per cent. when applied to small shipments of peasants' grain.

But even if all the grain were graded it would be quite as impossible for an elevator to deal with separate small shipments, and section 10 of the rules will always remain void. This rule is as follows: "The warehouses, as far as feasible in accordance with the room to spare, are bound to receive goods requiring storage from whoever desires such, and they have no

right to accept anyone's goods in preference to others'. In case of impossibility to comply for want of room with all the applications made simultaneously, shipments requiring the shortest storage are to receive preference." This rule, which is obligatory at all houses, whether grain is graded or not, says nothing of the size of shipment to be received, and makes no restriction as to the quantity of grain constituting the shipment to be obligatorily received. But at many elevators there are rules providing that in case of grain being subject to grading it shall be received in any quantity, regardless of the size of shipment from anyone tendering it, while if otherwise the separate shipments belonging to the same person must be similar as to quality and the aggregate of such shipments not to exceed the capacity of one bin.

This goes to show that the elevators are not prepared to receive small shipments, but can receive very large ones—which farmers seldom have. The elevator at St. Petersburg, where no grading is done, receives separate shipments of no less than 3,000 poods, while the state elevator at Nicholajeff receives grain in the same way as at those of the Riasan-Uralsk Railroad Company. That is, they receive in any quantities on condition that in case of a shipment occupying only part of a bin the payment be made for an entire bin.

It is obvious that at some elevators the governing rules, although confirmed by the Secretary of Finances, are in opposition to those enacted by the government.



A FEED MILL FOR ELEVATOR MEN.

The former tend to restrict the storage of ungraded grain by making the receipts of grain depend upon the size of that tendered, requirements which can be complied with only by merchants and dealers who can dispose of large quantities. Under such circumstances the elevators render no service at all to the peasants or farmers. The average grain grower necessarily patronizes the middleman and jobber, at whose mercy he is finally placed. This is the directly opposite result from that for which the elevators were intended. It is caused less by the elevators and their rules than by the general economic conditions surrounding the farmer and peasant as a class. These grain growers cannot, even if they desired to, profit by the services of the elevators, even in the case of the latter being prepared to receive peasants' grain in preference to the dealers' and at more liberal terms.

Owing to the generally poor development of the railway system and to an almost entire absence of accommodation on the waterways, there is no regular connection of the railroads with the rivers. The elevators cannot afford to drain the surrounding country of the grain, the transportation of bulk grain being in most cases inconvenient, if not quite impossible, and generally disliked also. The most important rivers, such as the Volga, the Dnieper and the Don, have gradually become so low and shallow as to allow of no regular navigation during the half year they are not frozen.

If elevators were built along these rivers, even on piles at the water's edge it would be nearly impossible for the barges and vessels to reach the landing berths for the delivery of their grain cargoes. And yet little or nothing is being done to remove the quicksands and banks which interfere with navigation. And the elevators, whether on a river, at a railway station or port, are very distant from the farms and continue to

be short of work, while on the other hand entire farming districts and trading centers often find themselves shut off from their former railway connections and shipping advantages, sometimes by the raising or lowering of the railroad tariff, or the opening of a branch line. This was the case with Rostoff and Taganrog, which immediately lost their important places in the grain trade to Novorossisk when the branch line connecting the Vladikavkas Railroad with the Black Sea was opened.

[TO BE CONTINUED.]

A FEED MILL FOR ELEVATOR MEN.

The feed mill which is here illustrated is claimed to meet every requirement in the wide scope of its use, having such practical features it commends itself especially to elevator men and members of the grain trade. Its construction is simple yet strong and durable. The best evidence of its wearing qualities is shown by the experience of one who states that in two and a half years of constant service there was not five cents expended in repairs.

The bearings are three times as long as their diameter, they are lined with the best and hardest babbitt metal, and are made in halves with four cap screws to take up the wear. Two of these bearings are bolted to the main shells having flanges turned square with the spindle.

The spindle is made of the best cold-rolled steel, that has the greatest tensile strength and the least elasticity. The driving end of the spindle is provided with a ball bearing, four burnished steel balls traveling between two cast steel plugs, which allows the greatest attainable results with the least possible friction.

The flow of the material is regulated by the sleeve around the neck of the hopper, which is raised or lowered by a forked lever attached to each side. When the revolving or running burr is fastened to the spindle by a key or set screw it is said to be impossible to have it moved and fastened without being thrown out of face. To overcome this a device, a divided tapered sleeve, is attached to this mill, which closes completely around the spindle, extending the full length of the hub, bringing the face of the burrs always at a right angle with the spindle, in perfect face and very easily moved. On the opposite end of the spindle is a safety stop for preventing the burrs from coming together when empty. Nails and pieces of metal would find their way into the mill and work considerable injury, but for the safety spring which allows their passage. Burrs as thick as are obtainable are carefully selected by the company's agents in France. Before these burrs are set in the shell of the mills they are examined and thoroughly tested and not used if found to contain any blemish or fault.

For grain grinding it is claimed nothing has been found to equal the French burr; its peculiar fitness for reducing cereals is yet to be questioned and disputed. A mill constructed on these principles will maintain the strong claim for fast and fine grinding, with capacity double that of many mills requiring the same power. The manufacturers, Sprout, Waldron & Co., Muncy, Lycoming Co., Pa., will furnish any additional information desired.

The Northern Pacific Railroad will transport seed wheat, barley, rye and flax at half rates until May 31, and between February 1 and May 31 of each year hereafter unless otherwise decided.

The Northern Pacific Railroad recently shipped a train of Manitoba wheat in bond from Canada to Sarnia, going over the Wisconsin Central and Grand Trunk by way of Chicago. It is the first shipment of the sort on record.

Corn shellers for shelling Indian corn were made in England, though corn was not raised there, and sent to this country during colonial times, and later, as we did little manufacturing of machinery then; but they were crude devices, and it was not until during the "fifties" that the modern style of ordinary sheller was brought out by Augustus Adams and others.

WEIGHING GRAIN AT MILWAUKEE.

BY M. S. LOWRY.

The correctness of Milwaukee weights is acknowledged by everyone, and it is seldom that country shippers complain of shortages. There are two sets of scales, wagon scales and hopper scales, operated by the Chamber of Commerce, and track scales operated by the railway companies. When grain is delivered or sold on track it is weighed on the wagon scales, and the tickets furnished the teamsters must agree or the grain be reweighed. In this way any error is corrected before the load is discharged.

The Chamber of Commerce scales, besides being operated by the weigher appointed by the Chamber of Commerce, are under the supervision of an assistant weigher, whose duty it is to see that all property is carefully and correctly weighed, and that the scales are in good working order and properly balanced. He enters each gross and tare in a book kept for the purpose, taking the figures from the scale beam, and his record must correspond with the weigher. The chief weigher daily inspects the numerous scales as to their correctness, and sees that the weighers and assistant weighers faithfully perform their duties.

Grain switched to public and private warehouses, mills, etc., is weighed in the same manner, with the exception of wagons, and is also under the supervision of assistant weighers. The fee for weighing is 40 cents per carload.

THE INDIAN CORN SUPPLY OF EUROPE.

The London *Times* says: The consumption of maize in Europe and the several sources whence the European countries derive their supplies of this cereal form the subject of a statement now in course of issue from the United States Department of Agriculture. The figures throughout refer to the cereal year ended July 31, 1894. In the following table the numbers denote the net imports, the re-exports having in all cases been deducted. The total is 134,496,000 bushels. Imports of maize into Europe for the year ended July 31, 1894:

Importing Countries.	Bushels.
United Kingdom.....	70,160,000
Germany.....	32,720,000
France.....	10,480,000
Holland.....	6,560,000
Austria Hungary.....	6,424,000
Belgium.....	4,800,000
Switzerland.....	1,712,000
Denmark.....	1,640,000

The countries which contribute to the maize requirements of the United Kingdom are shown for the last two cereal years. Imports of maize into the United Kingdom for the year ended July 31:

Exporting Country.	1893-94. Bushels.	1892-93. Bushels.
Roumania.....	28,520,000	25,721,000
United States.....	23,755,000	15,813,000
Russia.....	9,128,000	7,200,000
Canada.....	5,786,000	2,476,800
Turkey.....	1,931,500	1,768,000
Bulgaria.....	853,000	568,000
Argentina.....	838,000	7,098,000
Other countries.....	205,160	597,000
Totals.....	71,016,660	61,241,800

It will be noticed how considerable a proportion of the British supply comes from the Danubian Valley (Roumania and Bulgaria), while if Turkey and Russia be added we get for the later of the two years a total of 40,432,500 bushels from Eastern Europe, or 57 per cent. of the whole import, as compared with 33 per cent. derived from the United States. It is a curious circumstance that Germany obtained in 1893-94 nearly half of her maize imports from the United States, while Roumania was by far the most important source of the French supply, the United States having furnished not more than one-fifth.

The most remarkable figures in the second table are those relating to Argentina, the marked contrast in which must recall the parallel fact that the imports of hay into the United Kingdom from Argentina fell from 24,634 tons in 1893 to 805 tons in 1894. The Washington report under notice observes that one of

the features of special interest to United States farmers is that while Argentina has been cutting a wide swath in the international wheat market her exports of maize to European countries have fallen off greatly. They aggregate nearly 11,000,000 bushels in 1893 and less than 2,000,000 in 1894. It is remarked that it will occasion some surprise to Americans that the little kingdom of Roumania furnished the principal maize importing countries of Europe with more maize than the United States.

DEATH OF GEORGE D. BOYDEN.

The grain trade of Chicago cannot expect to retain forever its best men. It is a matter of but little moment how powerful a dealer may be upon the Board, when death approaches he is obliged to confront a power to which all must yield. The recent loss which the grain trade of Chicago has suffered in the death of George D. Boyden has been felt as seriously as any loss in years. He was well known and was the personal and intimate friend of almost all of the large dealers on the Chicago Board of Trade to whom he had often commended himself by his shrewdness and business ability.

Mr. Boyden was born in Conway, Mass., and came West with his parents, who settled in Lincoln, Ill., in 1857. He came to Chicago in 1875 and engaged in business with R. H. Flemming under the firm name of



GEORGE D. BOYDEN.

Flemming, Boyden & Co. Mr. Flemming retired from the business in 1887. A new firm known as Boyden & Co. was then formed, composed of Mr. Boyden and John and Thomas Barrett. This firm has existed until the present, and has always been a prominent concern in the grain shipping and commission business.

Mr. Boyden has been a very important factor in the building up of the grain shipping trade of Chicago. Through the long period he was connected with the Board of Trade his influence was always strongly felt on the side of honesty and fair dealing. He was very highly respected by the members of the Board, and for a man of his business interests had remarkably few enemies. The large fortune which he accumulated was the result of honesty and fairness combined with shrewd business ability. He was one of the founders of the Chicago Marine Insurance Company, and was its president at the time of his death.

Mr. Boyden's objections to appearing in any way in a public character had often caused him to refuse official connections with the Board of Trade. He invariably sought to remain in the background when engaged in any grain deal, and in the corn corner of November, 1889, in which corn rose from 32 to 58 cents per bushel, he was not known at the time as the author and chief promoter of the plan.

His death was due to heart disease and came very suddenly. He had been suffering for some time from the grip, but nothing serious was anticipated from this ailment. He was unmarried and 57 years of age. He was a member of some of the leading clubs of Chicago and a member also of several minor organizations. His mother, two brothers and one sister survive him.

A bill providing for the prevention of the spread of the Russian thistle has passed the Illinois Senate.

THE SYSTEM OF GRAIN INSPECTION; ITS ESTABLISHMENT AND GROWTH.

NO. XIII.

The grain inspection department at San Francisco, Cal., was established in 1882 by the San Francisco Produce Exchange. It remained under the control of the Exchange for about one year, when it was transferred to the San Francisco Produce Exchange Call Board Association. The association is composed exclusively of members of the corporation known as the San Francisco Produce Exchange. The rules of the association provide for a chief inspector of grain and an inspector of flour, hops and grain bags. The officers of the inspection department consist of a chief inspector and his deputies, the number of which varies according to the amount of work which the department is called upon to perform.

In the San Francisco market only a very limited percentage of the crop is inspected. The grain is handled entirely in sacks, and as a consequence none is graded according to the method in vogue with the elevator system. The crop is sold from the interior entirely in farmers' lots and is taken aboard ship without change. The shippers themselves arrange their cargoes from their different lots to an average grade which shall come up to the standard required by the inspection department.

Virtually the only grain inspected is that which is delivered through the option department. It will be observed in the accompanying figures that the number of tons of inspected grain varied greatly in different years. The grain inspection department in 1893 showed a flattering increase over the business of the previous year and the department is now in a prosperous condition. In addition to grain the inspection department also inspects produce, such as potatoes, cabbage and onions shipped overland and in carload lots.

The number of tons of grain inspected from 1885 to 1893 inclusive is as follows: From June 30, 1884, to June 30, 1885, 35,000 tons; 1885 to 1886, 53,000 tons; 1886 to 1887, 222,993 tons; 1887 to 1888, 202,700 tons; 1888 to 1889, 119,358 tons; 1889 to 1890, 75,558 tons; 1890 to 1891, 57,166 tons; 1891 to 1892, 63,552 tons; 1892 to 1893, 53,757 tons.

GRAIN INSPECTION AT MONTREAL.

The inspection of grain throughout the Dominion of Canada was provided for by an act of the Dominion Parliament, which provides for the appointment of inspectors by the government with their remuneration derivable only from inspection fees. The only connection that the Boards of Trade of Canada have with the inspection departments is the appointment by them of the boards of examiners. Each of these boards consists of five persons who, in the case of a vacant inspectorship, examine the candidates and communicate to the government the names of all found to be able and fit for the office. It is also the duty of the board of examiners to decide disputes between the inspectors and the owners of any article inspected.

Hospice Labelle was appointed inspector of the Montreal Board of Trade in 1887, and has filled the office since that time. Previous to his appointment there seems to have been no record kept of the quantity of grain inspected. The inspection staff consists of one inspector and two deputy inspectors.

The following table shows the total receipts of grain and the quantity of grain inspected at Montreal from 1887 to 1893 inclusive:

Year.	Total receipts of grain. Bushels.	Quantity of grain inspected.	
		Cars.	Bushels.
1887.....	15,618,321	2,075	6,322,340
1888.....	9,819,475	1,560	5,373,700
1889.....	13,302,395	2,117	9,104,800
1890.....	13,040,173	4,237	7,405,200
1891.....	18,054,564	9,773	14,266,200
1892.....	22,995,537	13,809	23,957,000
1893 (to Nov. 1).....	19,983,041	6,115	18,362,900

[TO BE CONTINUED.]

Swindlers are working the farmers of Ohio on the old game of the big yield, a little contract and a merchantable note.

PROTECTION FOR COMMISSION MEN.

Representative Cant of St. Louis county has introduced in the Minnesota Legislature a bill to relieve grain commission merchants of financial liability for innocently selling incumbered grain. As the law stands now the receiver is a mark for the dishonest shipper. Wheat, which, as a growing crop, may be plastered with a lien of some sort, may be shipped to Duluth and sold by the innocent receiver to a mill. The holder of the lien traces the wheat to the receiver and through him to the mill, but there loses track of it. The creditor holds the mill responsible and the latter falls back upon the receiver. The result is that the receiver must pay the indebtedness, for none but financially irresponsible persons would knowingly make a shipment under such circumstances, says the *Commercial Record*. Mr. Cant's bill unequivocally holds responsible receivers who are cognizant, or have any reasons to be cognizant, that the grain is encumbered, but relieves from responsibility the innocent receiver.

MANITOBA'S GRAIN TRADE.

Our grain export trade may be said to date from 1881. Some wheat shipments were made in earlier years, but the trade did not amount to anything of importance until after the country was opened up by the advent of railways, says the *Winnipeg Commercial*. Even early in the eighties, after an outlet by rail had been provided, the exports of grain were very small, as the large influx of settlers in those years led to an increased home consumption. The new settlers could not become producers for a couple of years, until they could get their farms in condition, so that exports did not begin to expand much until 1884 or 1885. Previous to the completion of the first railway outlet, a few thousand bushels of wheat were shipped out via the Red River to Fargo, and thence east via the Northern Pacific. The first shipment made in this way we have a record of, was in 1887, when about a carload was shipped as an experiment. In 1881, the first year in which shipment could be made by rail, about a quarter of a million bushels were shipped from Manitoba. From the last mentioned date there has been a steady increase in the wheat area every year, with the exception of the year 1892. The decrease in the area that year was owing to a combination of unfavorable weather conditions, which rendered it impossible for the farmers to get ahead as fast as usual with their work. The following statistics will show the crop area and wheat exports for a series of years:

Year.	Area Acres.	Export Bushels.
1886.....	384,441	4,000,000
1887.....	432,134	10,500,000
1888.....	No record.	4,000,000
1889.....	623,245	4,500,000
1890.....	746,055	11,500,000
1891.....	916,664	14,000,000
1892.....	875,990	14,000,000
1893.....	1,003,640	12,000,000
1894.....	1,010,186	15,000,000

Exports above include flour reduced to its equivalent in bushels of wheat. Exports from the crop of 1894 are not completed yet, but will approximate very closely the estimate given. The big bulge in exports in 1887 is due to an enormously heavy crop harvested in that year, while in the two following years the export surplus was reduced by drought. With a crop equal in yield per acre to that of 1887, Manitoba would now export over 20,000,000 bushels of wheat.

The crop of 1894 shows 76 per cent. No. 1 Hard, from the returns of the Winnipeg inspector. In 1893 about 53 per cent. graded No. 1 Hard. These are both years of high average quality. In 1886 the inspection returns showed 61 per cent. No. 1 Hard. These are the three highest records since the inspection system was established.

Manitoba is well supplied with elevators for handling and storing the grain crops. The following will show the elevator capacity, including storage elevators at Fort William, Port Arthur, Keewatin, Winni-

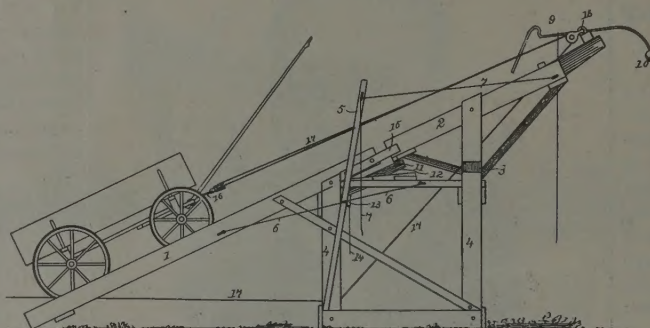
peg and all interior country points, for a series of years: 1890, 7,628,000 bushels; 1891, 10,366,800; 1892, 11,467,100; 1893, 11,817,100; 1894, 12,000,000.

The present year, 1895, will add considerably to the elevator capacity at interior points, as about thirty new elevators are already announced to be built this year. These will be the usual sized country elevators, for taking in grain from farmers. It is also likely that two or three large storage elevators will also be built this year, two having been already announced.

A WAGON ELEVATOR.

Morris Kallenbach of Boody, Ill., has invented an improvement in wagon elevators. This invention is designed to provide means for elevating a wagon containing grain, and for turning the elevated wagon into position to properly discharge its contents out of the rear end of the bed and into a crib or other receptacle.

In the drawing Fig. 1 is a side elevation. The inclined ways are grooved to receive the wheels of a wagon and their upper ends are sustained by a vertical frame at 4. The ways 2 are also grooved. They form a continuation of ways 1, and they are carried on the vertical pivot 3. Bar 5 extends obliquely upward and outward from the elevator frame, and is held in position by a line and a strut brace. Line 7 connects with an end of the turn table portion of the elevator way, runs through an eye on the upper end of bar, and is either provided with a weight sufficient to move the turn table or else terminates sufficiently



A WAGON ELEVATOR.

near the ground to be reached by the operator of the device. A catch is pivotally connected with the upper end of the turn table. It has an incline adapted to be acted on by the draft bail which connects with the wagon to be elevated, and it also has a weight which holds its operative end normally elevated. A line connects with the catch and provides means whereby the said catch may be detached from the bail. The cross bar, at the lower end of the turn table, has a central notch which latch 12 usually engages, thereby holding the turn table in line with ways 1, and the lever 13, provided with line 14, provides means for detaching the latch 12 from the cross bar 11. A stop bar 15 is secured to a side of the elevator ways in position to arrest the motion of the turn table, and such stop may be put on either side, and so permit the turn table to swing in either direction. A block is secured to the upper end of the turn table, and through such block runs the elevating cable.

In operation the wagon is caught by bail 16, the team is connected with an end of line 17 and the wagon is drawn up the incline until the turn table is reached and the catch has engaged the bail and secured the wagon against back motion. Then the line 14 is drawn downward and latch 12 is detached from the turn table, which then turns automatically in case line 7 is weighted, or is turned by the operator drawing downward on such line. The motion carries the wagon at right angles to the inclines of the elevator, and in position to discharge its contents into the crib or other receptacle. When the wagon is emptied and the turn table is swung to its original position the catch is disconnected and the wagon descends the incline.

It is reported that Mississippi has produced a surplus of corn, and for the first time in the history of the state corn is being shipped to the West. Kansas City grain dealers have buyers in the state.

CARRIERS AS WAREHOUSEMEN.

BY J. A. DEMUTH.

To the state legislator who feels in duty bound to advocate the various and often conflicting schemes of his constituents, his office is not, I imagine, a sinecure. There is a prevailing notion nowadays that when a number of citizens agree that certain legislative enactments would prove beneficial to themselves and the public, the justice and equity of such enactments is established beyond question. What is legislation for, if not for the general good? And when an act is clearly for the general welfare, and at the same time advantageous to special interests, it is difficult to see—particularly difficult for those who are specially interested—why the desired enactments should not be readily agreed to by those whom the people have placed in office for the people's good.

The Illinois Railroad and Warehouse Commission have been asked to compel railroad companies to provide grain storage facilities, or in lieu thereof to adequately compensate the owners of the grain elevators for storing it pending shipment. The principle on which this memorial is based is that no distinction should be made by the railroad companies between bulk grain freight and any other kind of freight. Their stations are required to be furnished with suitable depots for the reception of freight, and the laws require that all freight received in good order should be so delivered. As grain is one of the principal commodities of transportation, it would seem to be only fair that the railroad companies be required to provide suitable facilities for handling it, and the grain dealers of Central Illinois are not to be censured for seeing the matter in this light only. It remains for the Railroad and Warehouse Commission to view the matter from other standpoints.

Ordinarily all other kinds of freight can be shipped as fast as it is received. The movement of general merchandise is distributed throughout the year. There are certain times when boots and shoes are received in larger quantities while at these times other commodities are received in lesser quantities. The storage, or more properly the receiving, facilities for boots and shoes answer in turn for fruit jars and increased receipts of sugar. There is no time of the year when a station's receiving facilities are likely to be overtaxed, because of the rotation of the various kinds of merchandise and the adaptability of its depots to the reception of all kinds of freight excepting in the case of grain in bulk. Unless a station is provided with a regular grain warehouse the only practicable way to receive grain for shipment is to have it loaded by shippers directly into empty cars. The disadvantages of this plan are multitudinous, and a panacea for the ills which it is heir to would no doubt be found in a well constructed warehouse with hopper scales and special bins. If such warehouses could be made profitable by the railroad companies there would be no necessity for memorializing them into existence. They would spring up just as any other profitable institution comes into existence. It is because they are not profitable and because their use is required only during the harvest season that they are not already in general use.

The question whether a railroad company ought to be required to erect separate depots for the reception of grain in order to facilitate its transportation to market hinges in, it seems to me, with the question of the railroad company's obligation to transport grain within a certain time or in time for certain markets. There is little doubt that the ordinary facilities for receiving grain will enable the company to eventually receive and transport all the grain that is offered for shipment. But the difficulty is that practically all of the grain within a station's territory is presented for shipment at about the same time, and it is no more just to expect railroad companies to be prepared to receive grain as fast as it is offered than it is to expect them to transport it as fast as it can be hauled to their stations.

The wording of the memorial which the grain shipper's committee has presented to the Railroad and Warehouse Commission is not quite clear, as it does not state that the railroad company should be required

to furnish storage for grain pending shipment. Any other construction would practically amount to an arbitrary order to the railroad companies to embark in the business of public warehousemen, which action would manifestly be out of the jurisdiction of any body of legislators. The success of the memorial will depend not on the right of the state legislature to require railroad companies to build grain warehouses for storage purposes, but rather on the right to require them to provide grain receiving facilities. This much they can be justly required to do; but it is not a settled question that they can be required to receipt for different grades of different kinds of grain—certainly not when the grain is subject to grade at destination by a board of inspectors, whose action may entirely reverse the grading done by the railroad company.

The proviso in the memorial that in the event the railroad company fails to furnish storage for grain, and that storage may be furnished by shippers at the expense of the railroad company, will be found to be an impracticable solution of the difficulty. If the railroad company cannot be made to furnish storage at first cost to itself, it can hardly be compelled to pay a profit on the investment of grain shippers. What is needed at stations shipping large quantities of grain is a regularly constructed elevator in which grain can be stored pending the owner's decision to ship. If this is what is wanted by grain shippers it will be useless to expect legislation to bring it about. The difference between providing suitable facilities for receiving and shipping grain and receiving grain by grades for storage is the difference between a carrier and a warehouseman.

A practical solution of the matter which will eliminate the necessity of shippers or railroad companies providing receiving or storage facilities at all the stations on the line of the road would be the construction by the railroad company of steam elevators at a station situated midway on its line and another at its terminus. Supposing the natural flow of grain is eastward, the midway elevator could receive grain from stations west, the terminal elevator from stations east of the midway elevator. A regular grain train (or several when receipts demanded), manned by regularly appointed inspectors and weighers, with a car or a number of cars for each grade, could receive grain daily from the stations west of the elevators, conveying the day's receipts to the nearest elevator for storage. A car fitted with a good-sized hopper scale—say of fifty or one hundred bushels' capacity—so constructed as to be able to discharge its contents into the other cars, could be switched by the train engine from one car to another. A receipt for each load of grain could be issued by the inspector and weighman and an acknowledgment taken by them from the party delivering the grain, that he had seen the grain correctly weighed. The inspector and weigher should turn in at the end of his trip duplicates of original receipts issued to parties delivering the grain. The total of receipts issued should balance the weights of each grade as it is weighed into the storage elevator. These original receipts could be held by the shipper or indorsed to other parties. When the grain is to be shipped, a shipping order could be issued on presentation of original orders and payment of freight, elevating and storage charges.

The methods which are in use at stations where grain warehouses are furnished by the railroad company would not need to be materially changed. The grain buyer's receipt from the railroad company would be as available with the grain stored in the company's elevator at any other station as it would be if stored at his home station. Peradventure the owner should wish to ship a car of grain to a mill located west of his station and his grain had been stored in the company's elevator located east of his station, his freight charges should be computed on the tariff from his station to the mill—the company reserving the right to deliver from whichever elevator it found most convenient.

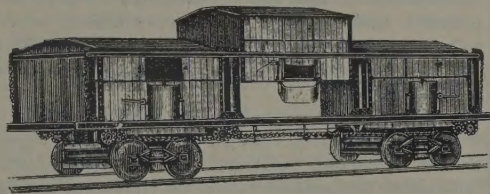
The inspector on duty on the "grain train" could be appointed by the State Warehouse Commission under the supervision of the Board of Trade. In short, the "grain train" could be operated exactly as a regular elevator is operated. It would, in fact, be practically a portable grain elevator, and I venture to say could be operated at a small fraction of the expense that would be incurred to the railroad companies in build-

ing a grain warehouse at every station. There would be uniform inspection, proved weights and a number of other advantages to make glad the heart of the grain shipper.

I am half inclined to compel the railroad companies to guarantee weights on through shipments. Why shouldn't they? If I hold receipts from the official weigher and inspector of the "grain train" for 500 bushels of No. 2 Soft Red and I order 500 bushels shipped by rail to Buffalo, why should not the railroad company be required by law to see that my 500 bushels were so delivered? Were it not that I am an extremely modest man and strongly averse to filling so important an office in the public trust as, for example, a position on the State Railroad and Warehouse Commission, I would decide this matter in favor of the shippers at once and forever. Under the circumstances, however, and especially in view of the fact that my grain train is rather new and not as yet in perfect running order, the railroad companies may continue to do business as heretofore.

A GRAIN ELEVATOR CAR.

A Baltimore gentleman, Charles Mackall, has invented the grain elevator car illustrated herewith, in response, it is said, "to an urgent need for something to take the place of the excessively tedious and cumbersome old style car, which requires coal or grain to be shoveled at great cost and loss of time." The improvement embodies peculiar advantages, also, which render it preferable, in that the car is practically available for general freight, whereas a common open gondola does not afford protection to merchandise. The im-



A GRAIN ELEVATOR CAR.

proved car embodies a platform frame work mounted on the usual trucks. The superimposed structure over the platform comprises three independent compartments or receptacles, each of which is adapted to be hoisted vertically within guides, the movement being effected by means of chain and pulley mechanism adapted to each compartment, which can be hoisted in succession, as required. Great power is afforded by the arrangement of the mechanism. Each compartment has a discharge gate at its central lower part, and, when elevated to some height, gives such inclination to the chute as to cause the grain, coal or other material in bulk to flow freely to the cart or other conveyance, almost entirely dispensing with manual labor.

With a compartment car of this style it would be possible to ship three grades or kinds of grain in the same car. If adopted by the grain carrying roads it would be the delight of the farmers and the man-with-a-scoop, and it would give the carriers as well as the regular dealers no end of trouble. However, it is so decidedly impractical that there is no probability of its being adopted.

A poor old couple in Georgia sat up all night to shell a few bushels of corn out of their meager stores for the Nebraska sufferers. Probably there has been no more genuine charity in all the gifts to Nebraska.

A Ledyard, N. Y., grain buyer recently purchased 80 bushels of oats from two strangers. The oats were stolen from a farmer, and the thieves were caught. Grain buyers should be careful in buying grain from strangers. The buyer may be innocent enough, but the law may require him to give up the grain or pay for it again.

The Kansas Senate has passed a bill providing that "any person convicted of conducting a bucket shop shall be fined not less than \$1,000 and not more than \$5,000, with imprisonment in the penitentiary not less than one nor more than five years." It provides also a heavy punishment for anyone convicted of being "a pretended buyer or seller in a bucket shop."

A BEAN ELEVATOR.

A correspondent of the New York *Sun* writing from Grand Rapids, Mich., says: In the matter of ordinary everyday culture this city may not rank with some others; but one concern here handles more beans in a single year than any other firm in the United States or in the world. The company has an elevator for beans, and through this elevator between 700 and 900 carloads of beans pass annually. A carload means from 520 to 540 bushels, and those who are mathematically inclined may figure out how many bushels or how many bakings this total represents. Most of the beans handled are Michigan grown, but often it is necessary to send to Canada and to Europe for supplies. Last year \$3,000,000 worth of beans were imported from Austria and other European countries, and the year before the imports were also large. All these beans did not, of course, come to this city, but about 100,000 bushels of the total were brought here to be sorted, sized and cleaned. This year many carloads of beans are coming from Canada, and as for Europe, instead of exporting, she is calling upon America for beans, and several large consignments will be sent over.

Aside from the threshing out process performed by the farmers who grow them, beans pass through several operations before they are ready for market. They are first poured down a chute into the cellar of the elevator, then hoisted to the upper floor, where they pass through a machine which grades them according to size and cleans them. Then they go through an automatic weighing machine and that takes them to the cellar again. To hoist them back up-stairs is the next operation, and then they are fed out upon a wide belt which carries them past half a dozen girls who pick out all the defective and discolored beans so that none but the best are offered to buyers. The girls are paid by the number of bad beans they pick out, and in the busy season, in February and March, between 80 and 100 girls are constantly employed. They can easily take care of 2,000 bushels a day. From the girls the beans pass into a big funnel, at the bottom of which stands a man to bag or barrel them for shipment. An average of three carloads are shipped away daily eleven months in the year, while in August there is very little if anything done in the bean line.

THE CHINCH BUG IN ILLINOIS.

The chinch bug is the subject of an interesting pamphlet about to be issued by the state. The pamphlet is part of the report of Professor S. A. Forbes, state entomologist, covering the work of his department for 1893-94. This advance section of the full report treats exclusively of the chinch bug and how to kill him by direct bodily attack and by the novel method of giving him a fatal and contagious disease and allowing him to die a slow and painful death.

There has been another "wave" of chinch bugs in Illinois the past season, and in the southern part of the state they destroyed much corn. Every few years there is an uprising of the chinch bug, in numbers sufficient to destroy the crops, and he will then disappear for a few seasons. His disappearance is due not so much to the attack of humanity as to a contagious disease—a sort of insect leprosy—which all but exterminates him. The study of this contagious disease has been part of Professor Forbes' work, and he is now able to grow the fungus which will inoculate the bug with the disease.

The chinch bug first began business in North Carolina about the time of the revolutionary war. He moved north and reached Southern Illinois in 1824. He has been a periodically active resident ever since. In size he is one-twelfth of an inch long, and slim bodied in proportion to his length. He has six legs and two pairs of wings. He is armed very like a mosquito—with a hard, jointed, combination drill and suction pump, which he drives into a blade of wheat or a stalk of corn and pumps out the juice. His back is covered with glands which give out an odor like that of a first ward political meeting.

"Starch wheat," grown in Switzerland, has two grains to each ear.

THE SONG OF THE BULL.

I'm down as low as I can get.
It seems I've got to die;
For each advance is always met
By the visible supply.

The viz, the viz, the awful viz,
The visible supply.
The instant that I think of biz
It bangs me in the eye.

I can't look up because I dread
To see that awful cub,
And if I dare to raise my head
He whacks me with his club.

—From Zahm's Circular.



[We invite correspondence from everyone in any way interested in the grain trade, or all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

SHIPPING AT TACOMA.

Editor American Elevator and Grain Trade:—According to the report of the harbor-master of the port of Tacoma, Wash., for the month of February, the total exportation of breadstuffs was as follows: Wheat, foreign, 486,878 bushels, valued at \$214,270; wheat, coastwise, 180,000 bushels, valued at \$77,400; flour, 25,099 barrels, valued at \$59,488. The inward registered tonnage was 45,046 tons, outward registered tonnage 41,264 tons. The deep sea arrivals include 26 American and 4 British.

SAMUEL COLLYER,

Secretary the Tacoma Chamber of Commerce.
Tacoma, Wash.

A DULL SEASON.

Editor American Elevator and Grain Trade:—This has been rather a dull season in grains here, as Chicago has not paid as much by 3 to 6 cents, difference in freight considered, as Minneapolis. So our wheat has all gone north. Our barley crop was excellent on the eastern end of the southern division of the C., M. & St. P. R. R., but west of Jackson, Minn., it was very poor. We hope for better business next season. Herewith find check for \$1 to renew my subscription to the AMERICAN ELEVATOR AND GRAIN TRADE.

Yours,

W. B. CLISLEY.

La Crosse, Wis.

WILL BUILD ELEVATORS.

Editor American Elevator and Grain Trade:—For the information of elevator builders who I see advertise in your esteemed journal I wish to call attention to the good elevator sites in the twenty-third ward of this city belonging to the East Bay Land and Improvement Company. There is a mile of water-front with 40 feet of water at the ends of the piers.

An attempt is being made to here build up a new port in New York where canal boats with grain cargoes, especially for export and Eastern shipment, will be attracted, as well as a large foreign shipping. To this end it is desirable that elevators be built, and the East Bay Land and Improvement Company intends to coöperate in building several houses on this water front. The enterprise is under the management of General E. L. Viele, 32 Nassau street.

In connection with the formal opening of the Harlem River Ship Canal, which will occur on May 30, and which will be attended with great civic and military ceremonies, it is General Viele's hope that at least one elevator will be built for the accommodation of a fleet of a hundred canal boats laden with grain. It is expected that that number of canal boats will come through the canal from the Hudson River. I am informed by General Viele that it is his intention to make the port and all other charges at his docks so low that large fleets of ships and canal boats will be attracted to it.

I submit these facts for the particular purpose of bringing the matter to the attention of persons who

might wish to build or operate elevators on this water-front.

Very truly yours,

ALEX. R. SMITH.

New York City.

SUCCESSFUL ORGANIZATION OF RECEIVERS.

Editor American Elevator and Grain Trade:—The Grain, Hay and Feed Association which was recently formed in this city by receivers is now in practical working order. The organization is perfect, and it has already resulted in a great deal of good to the members of the association. Steps have been taken to reduce the credit to local buyers, and now buyers who used to take all the way from three days to three weeks to pay their bills are paying them within the time limit. If they do not pay within the time limit their names are reported to the secretary of the association, and each member of the association is immediately notified. The slow buyers, seeing that the association is on a firm and solid basis, arrange, when they make purchases from the members, to pay them within the time limit.

The association is the most satisfactory organization for the protection of trade that has ever been formed among our receivers.

Respectfully,

J. N. WOOLISCROFT.

Cincinnati, Ohio.

DOES NOT WANT A CHANGE.

Editor American Elevator and Grain Trade:—I am heartily in sympathy with the writer of the communication "Is not an Idol Breaker," which appeared in the last number of the AMERICAN ELEVATOR AND GRAIN TRADE. I heartily indorse his opinions. Why should we wish for any change? Surely the grain dealer who has enough intelligence to engage in the business can see that one of two systems is preferable to both. In my opinion a change will never be able to be wholly brought about. In that case it will be very clearly seen that it is much better to stay with our old method.

If I have been correctly informed, it is only in France and Germany that the cental system of grain is used. England, Australia, India and other countries retain the method used in the United States. All transactions in grain with these countries can be made then without change.

Our present system has been in use for years, and I have always found it perfectly satisfactory. I hope those who advocate a change so vigorously will find it to their taste should they finally bring it about, but I see no advantages to be derived from the change.

Very truly,

A. KICKER.

FACTS SHOULD BE STATED PLAINLY IN CERTIFICATES.

Editor American Elevator and Grain Trade:—In your February issue we note the explanation by Agent Upspur of the mysterious words, "S. B.," on weight certificates on the C. & O. Elevator at Newport News. It is indeed pleasant to note that an elevator officer would even notice an ordinary complaint, and we wish to thank him for the explanation.

As usual, however, he seems to assume that *he knows it all*. He claims to have saved us a loss of \$4.57 on one car without even inquiring how the corn was sold. As a matter of fact, the corn that we complained of was sold Cincinnati grade and Newport News weights, and we claim that, as we are not interested in the grade at Newport News, the Newport News elevator people had no business to take any of *our* corn to *advance the grade* when the other fellow got the benefit of the higher grade.

To the heinous offense of not being personally acquainted with Agent Upspur we must plead guilty, and no doubt he is a pleasant and honorable gentleman, but his or our personality has nothing whatever to do with the loss of the corn. We find the aggregate of these differences amounts to considerable, while on one car it is a small matter.

If he will make his certificate read plainly the facts, no more or less, then the buyer and seller can easily adjust their differences on the basis of their contracts. Let the body of the certificate state the exact amount of grain each car contained upon arrival, and then add any explanation at the bottom that may be deemed necessary.

By the way, we are a little curious to know what kind of machinery is used to change damp corn into dry enough for steamer grade. No. 3 corn is supposed

to be the same as No. 2, except for dampness. In this connection we have tried very hard to gauge their grades, but without success. Some No. 3 corn (Cincinnati grade) has graded No. 2 in Baltimore, and precisely same kind of corn shipped same time to Newport News some cars graded No. 3 and some steamer.

We hope this correspondence will result in a better understanding, and assure readers that we have no other desire than to promote and encourage the trade.

Very truly,

MAGUIRE & CO.

Cincinnati, Ohio.

COMMENDS THE CENTAL SYSTEM.

Editor American Elevator and Grain Trade:—In the February number of the AMERICAN ELEVATOR AND GRAIN TRADE "Argentine" takes occasion to commend the old and laborious manner of handling grain and seeds by measures, quarters, stones, bushels, pecks, etc., for its saving of labor. Surely he is not in earnest. We have the grain and seeds in pounds before it is reduced to bushels and disposed of by the producer, after which it has to be again reduced to pounds and centals by the dealer, on which rates of transportation are reckoned, then again changed into bushels, etc., when dealt in upon the commercial exchanges in the grain centers.

"Argentine" must consider grain and seed dealers very credulous if he expects they are going to buy his "grain tables" on his assertion that they are "good enough," when there isn't a man in the business who does not readily see how worse than useless they are and how perplexing the complication they entail.

When the commerce of the world was in its infancy the apparent object of our forefathers was to make the handling of grain and seeds as complicated as possible, and that they succeeded is beyond question. Now when it is apparent that such a decided step in advance can be taken so easily it is to be hoped it may not be long delayed. The cental system has been adopted by France, one of the foremost nations of the world, and once adopted by the United States the grain men would no more return to the old laborious and superannuated way than they would again reckon time by the sun glass and money by pounds, shillings, pence and farthings.

Yours truly,

J. A. BROWN.

Chicago, Ill.

AN EARNEST CHAMPION OF THE 100-POUND UNIT.

Editor American Elevator and Grain Trade:—In the February issue of the AMERICAN ELEVATOR AND GRAIN TRADE you have "Argentine" styled "Not an Idol Breaker." It is a pity that mother Eve was not constituted like "Argentine." We might then all be in the Garden of Eden, and none of the forbidden fruit would be in danger of being plucked, and everything would be left as we found it.

"Argentine" expresses himself as one who is not in favor of buying and selling grain by the 100 pounds. However, the golden motto must have tempted him somewhat—gold is naturally tempting. Mr. R. Auzias Turenne should not have made it golden. "Argentine" admits: "I fear I run the risk of being thought too conservative and clinging with too much persistency to the methods of our daddies." He sees disadvantages as well as advantages in a change from the present system; he thinks the present system is good enough and advises us to let well enough alone, and to bear our present ills rather than run the risk of meeting with those of which we know nothing. To throw away the old grain tables and get up a set of tables for the new 100-pound system he considers a waste of brain power.

"Argentine" says: "Barley, rye, oats, corn, and even wheat to some extent, are malted. This product is invariably sold by the bushel. In respect to these grains, then, our present mode of buying and selling would have to be retained. Should we endeavor to make a change and succeed only in part, as the case might be, how much more complicated our system would become than it is now. If the multiplicity of standard measures is confusing would it not grow more confusing? While I think our present system is bad enough we should not overlook the fact that it might be worse." Good enough, bad enough—but it might be worse; let well enough alone!

I would hail with delight the introduction of the

system of buying and selling everything, even malt and coal, by the 100 pounds. I am of the opinion that if Mr. "Argentine" would demolish his old idol—but the old system is so rooted in him that to tear it out would hurt. My advice is, let the old system go and look at and examine the new, and I believe he would learn to like it. Where would progress be if we could not part with the old foggy ideas? Our parents were forbidden to eat of the fruit of the tree of knowledge; but for my part, I say, pick up the fruit of the tree of knowledge wherever it is found. It will not kill; it is wholesome.

It is true that the old or present grain tables will have to be abandoned and new ones compiled. But Mr. "Argentine" need not worry about the waste of brain power; the new method being much simpler, our children will be able to help us out. Mr. "Argentine" should be aware that our different states have different standard weights per bushel of grain of all kinds; even wheat has 56 pounds to the bushel in Connecticut. There is not one product, even salt or coal, that sells at a universal weight per bushel. Why all this confusion? Adopt the 100 pounds as the unit by all means. A hundred pounds of wheat, rye, corn, coal, salt, seeds, etc., is a hundred pounds all the way from Maine to California. I would be in favor of harmonizing the whole world in regard to weights, measures, money and speech.

Yours for progress and harmony,
Strasburg, Ill. H. BERNHARD.

OUR BOSTON LETTER.

Editor American Elevator and Grain Trade:—Every month's business seems the same of late—a few days of good business, then many poor ones. Corn and oats remain about the same. Feed is high and scarce.

Receipts and exports for the month of February, 1895, as compared with those of the same time in the preceding year, were as follows:

RECEIPTS FOR FEBRUARY.

Articles.	1895.	1894.
Cotton Seed Meal, tons.....	917	269
Corn, bushels.....	662,980	657,134
Wheat, bushels.....	206,431	6,809
Oats, bushels.....	242,498	223,940
Rye, bushels.....	530	2,330
Mill Feed, tons.....	812	1,416
Oatmeal, sacks.....	5,365	3,110
Oatmeal, barrels.....	4,565	4,189
Cornmeal, barrels.....	2,050	5,787
Malt, bushels.....	49,420	74,421
Barley, bushels.....	27,420	22,985
Hops, bales.....	684	579
Peas, bushels.....	2,234	11,281
Buckwheat, bushels.....		
Flour, barrels.....	2,465	3,748
Flour, sacks.....	9,880	1,784
Hay, cars.....	756	2,207
Straw, cars.....	70	59

EXPORTS FOR FEBRUARY.

Articles.	1895.	1894.
Wheat, bushels.....	624,753	270,961
Corn, bushels.....	304,612	664,519
Oats, bushels.....	3,270	1,050
Peas, bushels.....		
Barley, bushels.....		
Buckwheat, bushels.....		
Cornmeal, barrels.....	2,791	2,140
Oatmeal, barrels.....	2,285	355
Oatmeal, sacks.....	5,436	1,555
Flour, sacks.....	119,184	141,251
Flour, barrels.....	8,325	19,272
Mill Feed, bags.....	1,842	4,731
Hay, bales.....	38,905	146,372
Straw, bales.....		

The firm of Coles & Weeks, Middletown, Conn., was dissolved March 1, Geo. A. Coles continuing the business under the firm name of Coles & Co.

The firm of T. E. Robinson & Co., New Haven, Conn., was dissolved February 23, Mr. James Carr retiring. T. E. Robinson continues the grain business under the same firm name.

H. J. Coon & Co. of Chicago having retired from business, their former representative here, Mr. D. Seaverns Jr., has associated himself with D. W. Raulut.

Mr. J. A. Yantis, after an absence of about three years, is back in Boston again, representing R. E. Pratt & Co. of Chicago.

The steamer Venetian, Boston to Liverpool, which recently ran ashore in Boston harbor, had aboard 16,000 bushels of wheat, 19,100 bags of flour, 662 bales of hay and 1,159 bags of oatmeal, which is almost a total loss, it being under water for about a week.

BUNKER HILL.

PRACTICE IN HANDLING COMMISSIONED GRAIN.

Recently we have sent out a letter of inquiry to commission men at central markets asking for information about a complaint which we received recently. The letter and the replies received are as follows:

Dear Sir:—Some country shippers have complained that the commission merchants at central markets were getting the big end of the deal, that their risk was small and their profits large. We wish to present the facts in the case in the next number of the AMERICAN ELEVATOR AND GRAIN TRADE, and would consider it a favor if you would inform us if you will honor draft made against a shipment for 75 per cent. of its estimated value. What is the highest per cent. you will accept draft for?

Do you pay the balance to shipper at date of sale or when buyer pays for grain?

What commission do you charge?
Are you often imposed upon by overdrafts or misstatements as to quality of grain? Any information you can give us on this subject will be published anonymously or over your own name as you desire.

HONORS DRAFTS FOR 75 PER CENT.

Editor American Elevator and Grain Trade:—I would have no hesitancy in honoring drafts made against shipments for 75 per cent. of the estimated value on track here, but I would not care to accept drafts made for more than 75 per cent. unless the party was known to me. I always mail a check to the shipper for balance due him the same day I get the weights of cars from elevators or mills. My charges are 1 cent per bushel on wheat, corn, barley and rye, one-half cent per bushel on oats, and 1 per cent. on flax. I am sometimes imposed upon by overdrafts, but not often; but very often by misstatements as to quality of grain.

Yours truly,
Duluth, Minn. THOMAS GIBSON.

ADVANCE 90 PER CENT. ON SHIPMENTS.

Editor American Elevator and Grain Trade:—We would say in answer to your questions about honoring drafts that we have paid drafts on shipments the past year, and a great portion of them have been drawn for about 90 per cent. of the value of the grain. We are willing to advance 90 per cent. of the value of the grain here on any shipments. We make it a practice to remit shippers any balance due them above drafts the day the grain arrives here. Our commissions are one-half cent for selling wheat, corn and oats. During the last year we have not been imposed upon by any overdrafts or misstatements and our business with country shippers has been very satisfactory.

Yours truly,
Toledo, Ohio. W. T. CARRINGTON & Co.

SELDOM HAVE OVERDRAFTS.

Editor American Elevator and Grain Trade:—It is very seldom that we have any trouble in regard to overdrafts on shipments. Of course once in a while a shipper will make a heavy draft, but usually they are very willing to correct same, and often we find such drafts are made in good faith and afterward an error in weights is found. We invariably make returns and send balance to the shipper on the date of sale made by us. Our regular charge is one-half cent per bushel commission. We do not think commission men have been getting very rich out of shipments the last year. There has been only a fair business, and the commission charged in this market does not more than fairly pay us for the trouble.

Yours very truly,
Toledo, Ohio. J. J. COON.

ADVANCE MONEY TO REGULAR SHIPPERS.

Editor American Elevator and Grain Trade:—We advance any shipper 75 per cent. of the value of any grain shipped us to be sold on commission, and to our regular shippers we advance full value of their shipments when they need it. At times we advance them money before the grain is shipped at all, when they are bothered about getting cars to load. The balance due on shipments we remit as soon as cars are unloaded so we can ascertain the amount due.

Our commission for selling is: Wheat, 1 cent; corn and oats, one-half cent per bushel; flax 1 per cent. We very seldom make losses by overdrafts or any misstatements. We have found by 12 years' experience that the business cannot be done safely and well for less commission than that stated above, and if we

were shipping grain from the country we would rather pay the full commission mentioned, and have our business done safely and well than half as much commission and take chances by dealing with parties who are not making a legitimate profit from their labor.

Yours truly,
M. N. APOLIS.

HONOR DRAFTS FOR 75 TO 80 PER CENT.

Editor American Elevator and Grain Trade:—Our rule is to allow shippers to draw on us for 75 to 80 per cent. of the value on each car here; but our experience is that they draw for nearly full value, and occasionally they overdraw. We always pay the balance due as soon as the car is unloaded. Our commission is 1 cent on wheat, rye and barley, one-half cent on corn and oats. As a rule the shippers try to represent their consignments correctly, but they are sometimes mistaken in the quality of the grain. If we could get all the business we could do during the whole year, we could go abroad and wear diamonds, but the business is divided among so many firms that there is very little profit in it, and a considerable portion of the year the expenses are more than the income.

Yours truly,
Minneapolis, Minn. MAXFIELD & Co.

NO CAUSE TO COMPLAIN.

Editor American Elevator and Grain Trade:—So far as the Minneapolis market is concerned, we are free to say that shippers have no cause to complain of the treatment received at the hands of receivers here, if their grain is consigned to any of the old-established and well-known houses. We honor drafts on consignment up to 90 per cent. of the value and remit balance to shipper on the day we get official weights of the grain. This is usually one or two days after arrival and sale. Our rates of commission are 1 cent per bushel on wheat, barley and rye; one-half cent per bushel on corn and oats, and 1 per cent. on gross proceeds of flax.

It often occurs that shippers overdraw on consignment, and we are obliged to exercise the greatest care to prevent losses. Upon the whole, we consider the risk of loss to the commission house is many times greater than the risk to the shipper.

Yours truly,
Minneapolis, Minn. BROOKS-GRIFFITHS Co.

HONOR DRAFTS FOR 75 PER CENT. OF VALUE.

Editor American Elevator and Grain Trade:—It is usually understood by shippers of grain that they are at liberty to make draft against same for 75 per cent. of its estimated value. We are always glad to have them do this, and a great many times shippers draw for nearly the full value of their shipments. We are anxious to make account sales as promptly as possible, and in order to do this we never wait for the buyer to pay for the grain, but make our account sales just as soon as we are able to get the freight bill and the weight of the car. Our commission on wheat is one-half cent per bushel. Of course it is impossible for us to keep from making losses once in a while through paying drafts drawn against shipments. The drafts usually get in several days ahead of the shipment, and we have simply to take the shipper's word for the amount and grade of wheat in the car. Taking it altogether we think that our commission is very small in comparison with the risk that we take.

Yours truly,
DULUTH.

IRRESPONSIBLE SHIPPERS HOWL LOUDEST.

Editor American Elevator and Grain Trade:—We make a practice of honoring drafts on bills of lading for shipments of grain for three-fourths of shipper's estimated value, which is the highest percentage that we make a rule of paying. We remit the balance to the shipper on receipt of weights of each shipment. Our commission charges are the regular charges established by the state of Minnesota, which are one cent per bushel for corn and wheat and one-half cent per bushel for oats.

Our experience in the commission business is, that we lose more by overdrafts on shipments than we do from bad accounts. This, we are frank to say, however, is from dealing with irresponsible shippers, which are, and we expect always will be, a curse to the trade. They always make the loudest "howl" and are always being abused, and we have come to the conclusion that, where a shipper writes us that he has not received good treatment from the hands of

some other commission house, it is good policy to allow someone else to handle his goods.

Yours truly, W. P. DEVEREUX & Co.
St. Paul, Minn.

HONOR DRAFTS FOR 90 PER CENT.

Editor American Elevator and Grain Trade:—We honor drafts with bill of lading attached for 75 per cent. of estimated value, providing we feel reasonably sure that the shipment is as stated. With regular shippers we honor drafts as high as 90 per cent. of estimated contents of car. We do not pay the balance due shipper till we get it from the party to whom we sell, but as we get the pay for all grain sold as soon as it is weighed, it amounts to practically the same to the shipper, for we could not render account sales till we received the weight.

Our commission on wheat, barley, rye and corn is 1 cent per bushel, on oats one-half cent per bushel, and on flax 1 per cent. on car lots. We have had but few drafts made on us which were not fully covered by the shipment. In a few cases parties which have intended to draw for nearly the full amount have overdrawn by the grain not grading as high as expected.

Regarding the commission man having the long end of it, we fail to see how such is the case. First, our commission is not clear gain; we have large expenses to come out of it, and especially is such the case where there is soliciting in the country to be done. Second, in this section the business only lasts about three months, and the commission man has to pay office rent and other expenses, while he is hardly getting enough business to pay office rent. If we could only do the business the year round that is done in three months there would be more in it.

Yours truly, PAIGE & HORTON.
Duluth, Minn.

VERY LITTLE COMMISSION BUSINESS DONE.

Editor American Elevator and Grain Trade:—We do not think the commission merchants are getting the big end of the deal by a large majority. In fact, there is very little of the old style commission business being done in grain these times. In the business that is done the commissions are very small, being one-half cent per bushel on wheat, corn and oats in this market [Toledo], together with liberal advances to any good, reliable shipper who we know will keep his contracts good by paying at any time, when from some turn or other in the market his account might be overdrawn a little.

The fact is, most all the grain received at the market centers is bought by commission men before it is shipped, based on some grade agreed upon and subject to inspection and weight at the terminal market where it is inspected and unloaded. Under this system the shippers of grain throughout the country, on account of the numerous competing bids for the grain, get high prices based on the prevailing markets of the grain centers.

We pay shippers balance due them on account the day their grain is sold. We are seldom imposed upon by overdrafts or deception as to grade of grain, as we usually are personally acquainted or know our customers by reputation; otherwise we would be "razzle-dazzled" frequently.

Yours truly, P. R. ODUCE.

LITTLE GRAIN CONSIGNED TO TOLEDO.

Editor American Elevator and Grain Trade:—We honor drafts made against shipments for 75 per cent. of their estimated value. When shippers are known to us personally we frequently honor their drafts in full, and shippers of good character we would not hesitate to honor their draft for 90 per cent. of the net value of the grain. We ordinarily make settlement in full with shippers within 30 days. The commission we charge is one-half cent per bushel.

Overdrafts are frequent. There are some shippers of good standing, who make it a point to make overdrafts on their shipments during the busy season immediately after harvest, and as they are loading from five to ten cars every day, and as it takes some time before these arrive in our market, we have no way of checking against their overdrafts, but have to depend upon their honor, and many of these shippers do not give us so much as a memorandum of the contents of the cars, and all we have to guide us is the bill of lading and bill-of-lading weights. We have at the close

of the season had as much as \$2,000 in overdrafts against one party. These parties, however, were known to us personally, or we would not have been so lenient. We would not pay draft with strangers without a statement of the actual contents of the cars. We charge interest on ledger balances at current rates, which in part compensates us for the money paid in overdrafts. We don't often find misstatements as to the quality.

We do not believe that country shippers have any ground for complaint of the commission merchants at present. We believe that if there are shippers making complaints there must be something wrong at their own door. We believe that a very small percentage of grain at present is consigned. It is largely an article of merchandise bought outright by commission merchants. A careful estimate of our own work places the amount consigned at less than 10 per cent. of the amount of grain we handle. We believe that more than nine-tenths of the grain that is handled in the Toledo markets is handled by direct purchase through brokers, and all the grain merchant receives is about one-fourth cent a bushel as his profit.

TOLEDO.

WHEN BUYING SHIPPERS GRADE TOO HIGH.

Editor American Elevator and Grain Trade:—Note what you say in regard to complaint of country shippers of grain. We would say that in a good many instances where a country shipper consigns to a central market, it appears to him that he has good cause for complaint in the way his grain is handled. A country shipper does not at all times buy his grain according to the grades that the state inspection department puts on it; that is, he is inclined to grade it up a little for the sake of buying it; especially is this the case where competition is sharp in his town, and he is then surprised when the state inspection department fails to uphold his grade. Then, also, there are times when it is almost impossible for a commission merchant to dispose of grain at its real value. When there are no buyers on the market he cannot get the price the grain ought to bring, and it has to be sold for the best price possible. The country shipper cannot always understand this, and he is inclined to think that he is being "done up."

We are always willing to honor drafts on cars of grain, where we know the shipper is reliable, for 75 to 80 per cent. of its value, and often where we are acquainted with a shipper we allow him to overdraw his account on certain cars if we know he will ship more and even it up. As a rule all shippers of grain are strictly business men, and we very seldom are imposed upon by overdrafts or misrepresentations as to the quality of the grain. It is quite common for a party who has bought a car of grain at a terminal point to refuse same on the ground that it is not up to sample sold by and demand a reduction in the price, which we allow if we think his claim is a just one, and if not, we sell the car to other parties.

Our commission on wheat, barley and rye is one cent per bushel and on corn and oats one-half cent per bushel. This will average about \$5 per car. We make account sales to shipper promptly when we collect for the grain and pay the freight, which takes from three to five days after the car is received.

Yours truly, GEO. A. MOOMAW Co.
Minneapolis, Minn.

NOT PARTICULAR AS TO AMOUNT OF DRAFT.

Editor American Elevator and Grain Trade:—We are not often imposed upon by misrepresentation of shippers or overdrafts, because we do not pay any drafts for parties that we do not know are all right. When dealing with parties that we know are all right we are not very particular as to the amount of their drafts. Nobody that means to do right will overdraw. We do not object to shippers drawing for very nearly the full value of their grain if they so desire. We remit balances the same day the goods arrive.

Shippers are very much mistaken about the profits of the commission man. We get but one-half cent commission on consignments of wheat, corn and oats, and out of this we have to pay office expenses, telegrams, salaries for looking after the grain, and all that sort of thing. Where we buy we buy net track Toledo or Detroit within one cent of the market and sometimes closer. The terminal charges at Toledo and Detroit are paid by the seller. The elevation here is one-half cent, and the other charges for inspection, insurance,

etc., are trifling. We never charge interest on drafts at any time, even during panics when goods are consigned for sale on arrival. Generally we bid within one cent of the market, and after paying the one-half cent elevation we have but one-half cent left to cover inspection, insurance, interest on drafts, commission and the risk on the market.

Our bids are all made at the close of the market on the day, good for acceptance before markets open the following day, which gives both buyer and seller an equal chance. All transactions here are cash, and when we sell grain to-day we collect for it to-day and make remittance for balances the same day. We never sell goods in this market until we get elevator receipts, which is generally the first business, excepting in cases of a strong rush at harvest time. In Detroit goods are sold when they get notice of arrival and grade at elevator, and it takes one or two days, before account sales can be rendered, which cannot be done until they get elevator weights.

Taking it all in all, our margins are exceedingly small, and the country shipper gets the big end of it all the way through. Perhaps there are parties in the grain trade who try to strike bargains to their best advantage, but our bids are always made fully up to the closing market, and are made alike to everybody. We aim in every possible way to accommodate, and strive for the interests of our patrons, and in that way have built up our large business during the past 25 years.

Yours very truly, J. F. ZAHM & Co.
Toledo, Ohio.

HONOR DRAFTS FOR ANY REASONABLE PERCENTAGE.

Editor American Elevator and Grain Trade:—If the commission merchants get the big end of the deal, as some of the country shippers claim, we would like to know where it comes in. It has never been our experience, and we have been in the business altogether 45 years. The strictly commission business became so poor that we gave that up long ago, and now in most cases buy the grain direct at a certain price delivered here or f. o. b. the sellers' track. But of course we sell on commission whenever our customers consign us anything to be sold that way.

We believe the custom is to honor drafts against consignments for 75 to 85 per cent. of the estimated value of the grain. We, however, have never made any rule in regard to this matter, simply asking the shipper to leave sufficient margins to cover possible contingencies, such as misgrading and the risks of a decline in the market. We have always aimed to pay our customers' drafts against shipments at as high a per cent. as possible, because we know in many cases they need all the money they can get to carry on their business. Of course it depends upon who the shipper is, and our past experience with him. The day the grain is in and sold we make up the accounts and remit the shipper whatever balance is credited to him. On the whole we should say the country shipper is an honest man, and is to be believed, but once in a while we run across a black sheep who imposes on us by overdrafts and oftentimes misstatements as regards the weight and quality of the grain. Such shippers are found out very quickly and left severely alone.

Our commission for selling cash or grain to arrive is one-half cent per bushel, and we consider this little enough after considering the great expense we are put to for office rent, clerk hire, the maintaining of a produce exchange, and the money that is spent for postage and telegraphing to keep the dealers thoroughly posted as to the price the grain is worth. We note with regret that many country shippers do not appreciate these favors, and many of them to save this paltry one-half cent a bushel commission are endeavoring to work the business direct.

This is not as it should be, for it is driving the grain men from the large cities into the country, where they are assuming control of country elevators to a large extent. This is increasing every year, and there will be but one result: The country shippers of moderate means will be driven out of the business and their profits consumed by the grain men of larger proportions.

Yours, W. A. RUNDELL & Co.
Toledo, Ohio.

The January earnings of the Minnesota State Grain Inspection Department amounted to \$5,000.

THE SILO, AS ADAPTED TO THE PRESERVATION OF BREWERS' GRAINS.

BY E. P. MUELLER.

That "necessity is the mother of invention" is an axiom as old as the hills, but just as true to-day as it was ages ago. Competition in any line leads to the cheapening of commodities. If any article is to be cheapened it must be along the line of first cost of production. The greater the difference between the cost of production and finished product, the greater the profit. These are not only facts, but they are also well defined business principles, and if you are to reap a profit as the reward of your labors you must think along these lines.

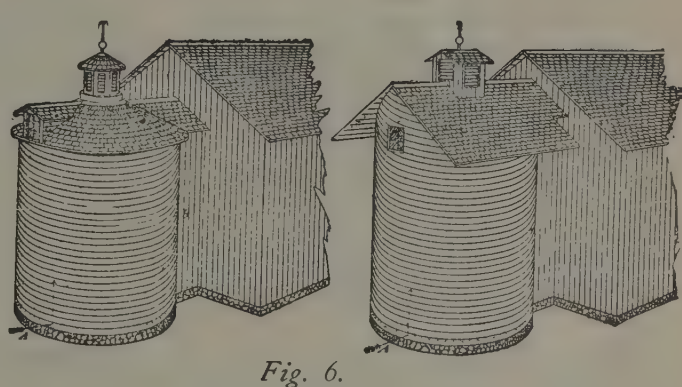
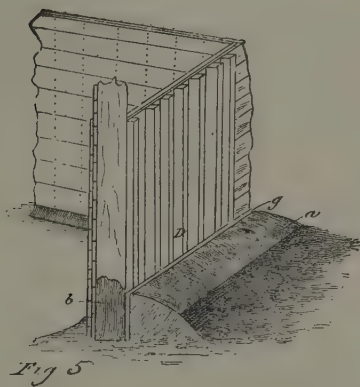
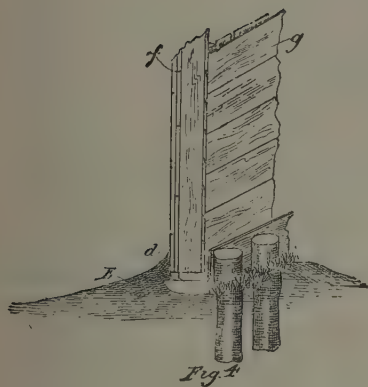
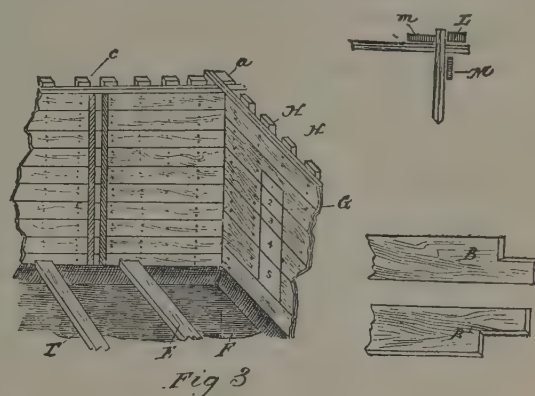
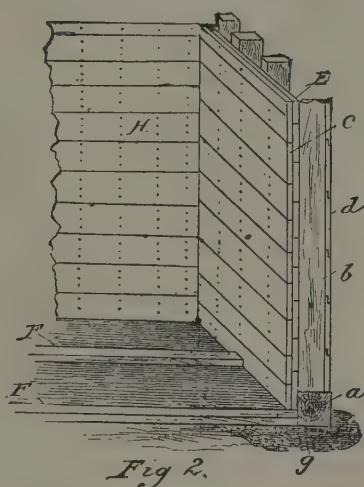
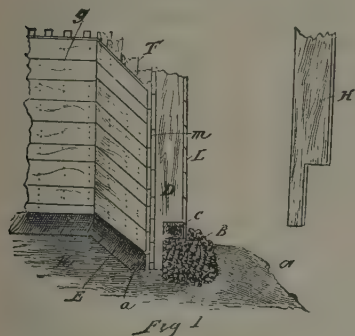
The farmer who depends upon the production of butter, cheese or milk as a source of profit knows only too well that strong competition has materially decreased this source of his income, and that if he is to continue in business he must reduce the cost

as they are wanted without loss of material or quality.

Herewith are given a number of cuts showing the various improved methods of construction of silos, any one of which may be found perfectly practicable. The process is a simple one and depends only upon the complete exclusion of the air from the stowed mass of grains. Any width and depth of silo may be used, but all things being equal the greater the depth consistent with the convenient handling of the grains, the better the results. The round silo is perhaps the best and most economical form, and is preferred by many. A silo for the holding of brewers' grains may be constructed with lumber at present prices at about 60 cents per ton capacity. You may easily arrive at the desired capacity of your silo by computing the cubical contents and dividing by 20, as there are 20 cubic feet of brewers' grains in each ton. The reader will readily see that if he can buy the grains during the summer season at \$2.50 per ton and hold the same for future use by aid of the silo, he makes a net saving of \$2.00 per ton, which, during the season, will

ent; *G*, the cross sills, are mortised into the sill *A* to prevent spreading from the great pressure of the mass in the silo. All pieces of timber going below the surface should first be heavily coated with hot gas tar.

Fig. 3 presents the best possible way of making secure corners in the square silo. The heavy pressure brought about by the settling of the contents makes it necessary to have the corners well secured, as they sustain the greatest pressure, and any springing or pulling apart at this point would admit the air and loss would result. The corner *A* is made by using three scantlings, the center one *A*, 4x4, and two side ones, as depicted in side diagram, *L*. The first lining boards are notched at the ends, as shown at *B*, *B*, so that they can be crossed and nailed as in *L*; they are also nailed well to *M*, *M*. This makes a very secure corner and one that will not pull apart. The second lining boards are simply sawed square at the ends and nailed through the tarred paper and the other boards to the studding. The silo may be subdivided by the use of foot-wide planks held in place by grooves made by cleats nailed securely to the walls as at *C*. *G* is the door made by



price of his salable commodity, and just here is where we come to his relief. The extensive and ever increasing manufacture of food products for man employing in their use the cereal grains in the process of manufacture leave certain residues known to the market as "by products," which, in their turn, become valuable foods for the fattening of stock or the production of milk. In all this list of "by products" there is no one so well known or so universally used as brewers' grain. The ever increasing demand for the wet grains proves conclusively that every feeder who is induced to try this feed at once realizes its true worth, and would feed it thereafter if he could but have a sufficient supply at hand.

Having annually handled large quantities of grains, I am thoroughly conversant with the business. The limited production of brewers' grain during the colder months of the year brings a sharp and active demand that forces the price up to \$4 to \$4.50 per ton laid down at purchaser's railroad siding between September 1 and May 15; while on the other hand, the same grains between May 15 and September 1 can be bought at about \$2.50 per ton. Several years of experiment and actual practice prove conclusively that these grains may be purchased during this period of cheapness and be successfully held in silos until such time

amount to many thousands of dollars to the consumers of grains.

There is no better nor more economic feed for milch cows in use to-day than brewers' grains if fed in a sweet condition, and such eminent authorities as Prof. E. W. Stewart, of this country, and Dr. Wolf, of Germany, place its value at \$6.40 per ton, while the experience of feeders generally is that this is a very conservative estimate.

Fig. 1 represents an easy and economical way of building a silo when it is necessary to use a wall; let the trench for the wall be dug about 18 inches below the surface and 6 inches or more of stone be broken into the bottom of the trench to act as a drain to carry away any surface water that may be present. *M* shows the inside ceiling of two thicknesses of inch boards with the tarred paper between; the inside boards should be made to lap the cracks of the first course and the whole firmly nailed to the studding *F*. Any coarse lumber will do for this purpose if the edges are straight and the boards are free of knot holes. *E* is the grout or cement so placed as to exclude the air that may come in under the boarding. *H* shows how studding should be cut to fit the sill.

Fig. 2 shows the building of a silo without the stone foundation; the sill *A* is bedded into a layer of cem-

sawing out the space between two studdings, and may be of any length desired. Cleats are nailed up and down on the sides of the studding *H*, *H*, on the outside of the lining boards. The same boards are then returned in their regular order and loosely tacked until the pressure of the mass from the inside holds them firmly in their place.

Fig. 4 illustrates another plan of bracing the sills that obviates the use of the cross sills, as in *Figs. 2* and *3*. The sills may be made by spiking two 10-inch planks together in *L* form and setting the studding inside the angle thus formed and spiking through the plank into the studding, thus saving a mortise.

Fig. 5 is yet another way of making the bottom secure, and is the plan generally employed where the silo is built inside the barn, or where no drainage is needed. The plan is to excavate a cellar a foot or more in depth, as large as the outside diameter of the silo. An inch board, *G*, is set up against the solid earth, and the studding ranged along the inside, care being taken to secure a proper alignment. The spaces between the studding are to be filled with grout when the structure is completed.

Fig. 6 shows two methods of roofing a silo, both of which are easily understood. *A*, *A* shows where the air is admitted for ventilation.



A new brewery is to be erected at Monroe, Mich.

There is a project for a new brewery at Columbus, Ga.

Henry F. Ortlieb has a new brewery at Philadelphia.

Fisher & Durham have a new brewery at Williams-ville, N. Y.

A \$50,000 brewery will be established at Lyons, N. Y., this spring.

Wm. Kearney intends to establish a brewery at Syracuse, N. Y.

It is reported that a large brewery is to be erected at Bozeman, Mont.

Henry Maner has established a new brewery at San Bernardino, Cal.

A recent fire at Graymont, Ill., destroyed W. K. Landis' malthouse.

Rundsen & Enwold are operating their new brewery at San Francisco, Cal.

C. M. Conrad will make additions to his brewery at Erie, Pa., to cost \$30,000.

Frank Ott is contemplating the establishment of a brewery at Enterprise, Ore.

Thomas Norton is erecting a brewery at Anderson, Ind., which will cost \$60,000.

The Muench Brewing Company has begun operations at its new plant at Appleton, Wis.

The Anaconda Brewing Company, Anaconda, Mont., will erect a new brewery to cost \$15,000.

Kurzeja & Tobolewski will establish a new brewery at Danville, Pa., at a cost of about \$40,000.

The Rockford (Ill.) Brewing and Ice Company has been organized, with a capital stock of \$200,000.

Simon Linsler is making extensive improvements and additions to his brewery at Zanesville, Ohio.

Church Bros. of Trempealeau, Wis., who carry on a feed business, use considerable wet brewers' grain.

The Hellman Brewing Company has been organized at Waterbury, Conn., with a capital stock of \$50,000.

The Western Brewery Company of Belleville, Ill., has increased its capital stock from \$250,000 to \$575,000.

The Brilliant City Brewing Company has been incorporated at Findlay, Ohio, with a capital stock of \$100,000.

The Grand Rapids (Mich.) Brewing Company is about to begin work on a new brewery to cost about \$100,000.

The Winter Bros. Brewing Company of Pittsburg, Pa., has been incorporated with a capital stock of \$600,000.

The Anderson Brewing Company will establish a brewing plant of 20,000 barrels' capacity at Beaver Falls, Pa.

Additions costing \$40,000 are to be built for the plant of the German-American Brewing Company at Buffalo, N. Y.

The Knoxville Brewing Company of Knoxville, Tenn., has applied for a charter and will construct or buy a brewery.

The Chattahoochee Brewing Company's plant between Girard and Phenix, Ala., will be enlarged at a cost of \$100,000.

The New York & Brooklyn Malting Company of Brooklyn, N. Y., writes us that the following officers of the company were recently elected: Henry Alten-

brand, president; John G. Gillig, vice-president; R. F. Krackowizer, secretary, and Joseph Seitz, treasurer.

The Crown Point Brewing Company is remodeling its brewery at Crown Point, Ind., for which \$15,000 will be expended.

Moerschel Bros. have purchased the Franz Brewery at Jefferson City, Mo., and will remodel the plant with modern machinery.

The brewery at Mendota, Ill., which was destroyed by a boiler explosion recently, will be replaced by another structure at a cost of \$50,000.

The British Barley Growers' Association has been formed in England to secure the placing of a tax on barley imported for brewing purposes.

The Robert Portner Brewing Company of Alexandria, Va., intends to make additions and improvements to its plants at a cost of \$50,000.

The Weidman Brewery at Sorrel Horse, Pa., which was destroyed by fire some time ago, will be rebuilt and a modern and improved plant put in.

Citizens of Millstadt, Ill., offer a bonus for a new brewery, and St. Louis capitalists are considering the feasibility of erecting a plant at that place.

The Phil. Scheuermann Brewing Company, which operates the Union Brewery at Hancock, Mich., has been incorporated, with a capital stock of \$50,000.

The Cold Spring Brewing Company has been incorporated to operate the Chicago and Naperville Brewing and Malting Company's plant at Naperville, Ill.

A new 100-horse power boiler in the M. Enz Brewing Company's boiler house at Bennett, Pa., exploded recently, damaging the plant to the extent of \$3,000.

The J. Oberman Brewing Company of Milwaukee, Wis., has been placed in the hands of a receiver, the company failing to meet the payment of matured bonds February 1.

The Sauk Rapids Brewing Company's building at Sauk Rapids, Minn., the plant in which was owned by Edward Belg and Adam Jochim, was burned February 14. Loss \$6,000; no insurance.

The American Grains Dryers Company has been incorporated in Chicago with a capital of \$50,000 to manufacture grain driers. The incorporators are Major McGregor, C. C. Johnston and C. A. Heckman.

John B. Manning, the maltster, has made an assignment at Buffalo, N. Y. The assignment is ascribed to the failure of the Standard Brewing Company of Baltimore, which company owed John B. Manning and Manning & Sons upward of \$100,000. Total liabilities are not known; the preferences amount to \$50,000.

The A. F. Bullen Malting Company of Chicago inform us that they expect to build a malt and storage house the coming season. Mr. Bullen says: "I think very favorably of the new steel tank storage. We have one now which has been filled with malt since last fall. We will open this in warm weather. There is no doubt in my mind but that it will make most excellent storage."

A new screen for malt and other substances has been patented in England by W. Rainforth, W. Rainforth Jr. and H. S. Rainforth of Britannia Iron Works, Lincoln. The screen frame consists of side pieces slotted for the passage of rods carrying cleaning devices and of longitudinal pieces recessed for the insertion of the bars. Any movement of the bars is

prevented by soldering or brazing, for which provision is made.

The claim is being made in England that on account of the abolition of the malt tax barley has been lower in price, and that many substitutes have been found for it, importation increasing very materially.

A petition to Congress from the Milwaukee Chamber of Commerce advocated an increase of internal revenue duty on fermented beverages made from other material than malt, and deprecated any increase on liquors brewed from malt only. It is claimed that malt and corn is as wholesome as malt, and that the plea of adulteration is a great mistake.

Henry Humphrey, an employee in the Lake View Malt House at Buffalo, N. Y., was recently smothered to death while drawing dry malt through chutes into a bin on the ground floor. While the malt was running he stepped into the bin and was at once sucked under. His comrades were unable to rescue him, and before the chutes could be shut off from below his head was buried under four feet of malt.

BARLEY IS SCARCE.

Editor American Elevator and Grain Trade:—Barley is scarce in this vicinity, and has advanced from 5 to 7 cents per bushel the past month. There will be none left to carry over into next season. I have been carrying on a malting business here in my own name for the past four or five years.

Yours truly,
Dundas, Canada. JAMES J. STEELE.

NEW PLANT IN SUCCESSFUL OPERATION

Editor American Elevator and Grain Trade:—We now have our new 300,000-bushel pneumatic malting plant (Galland-Henning system), which was completed last summer, in successful operation. We still continue our floor malthouse and have a total malting capacity of 500,000 bushels. With our new elevator we have a storage capacity of 300,000 bushels.

Yours truly,
Detroit, Mich. H. W. RICKEL & Co.

WILL ERECT MALTHOUSE AND KILNS.

Editor American Elevator and Grain Trade:—We contemplate the erection of an additional malthouse and kilns this season. The malthouse will have a capacity of 600,000 bushels of barley per annum, and will be constructed on the pneumatic plan. It will be either a 40-drum Galland-Henning or a 10 compartment Saladin system with a capacity of 1,000 bushels per compartment. It has not been definitely decided as yet which of these two systems will be adopted.

Very respectfully,
Manitowoc, Wis. THE WM. RAHR SONS Co.

MALTING ONLY FOR OWN REQUIREMENTS.

Editor American Elevator and Grain Trade:—In answer to your favor we would say, we would be glad to give you any information regarding barley and malt that might be of interest, but we have for the past several years been unable to do anything in malt in the United States because of the tariff. Therefore, we have of late been malting only for our own requirements. Under these circumstances we are not as well informed as we probably would be if engaged in the business on a large scale, as formerly.

Yours very truly,
Hiram Walker & Sons, Limited.
Walkerville, Ontario.

TRADE QUIET; NEW MALTING MACHINE.

Editor American Elevator and Grain Trade:—Trade in malt remains quiet and barley prices change but little since there appears to be enough to fill anticipated demands.

Mr. Ricketts, of our company, is organizing in Chicago a company to operate his improved pneumatic malting machine. The company will have considerable advantage since the machine costs less to build than 50 per cent. of the machines now in use. It can be built to make 50 or 1,000 bushels per day, and as it works on the gravitation plan it costs comparatively little to run. The kiln used in connection works entirely by machinery and costs about as much as the perforated iron floor of some kilns now in use.

It is proposed to build a 500,000-bushel house at Chicago to show the working of the machine, after

which a factory will be erected for manufacturing them. Several sites have been offered as a bonus to build. Two of them have railroad switches and Chicago rates to all points.

Yours respectfully, J. B. RICKETTS & Co.
Dubuque, Iowa.

THE BARLEY CROP OF 1894.

According to the report of statistician of the agricultural department there was a reduction of the area planted to barley. The acreage of the crop of 1894 is 98.5 per cent. of that of 1893, or 3,170,602 against 3,220,371. The product of 1894 is 61,400,465, against 69,869,495 in 1893, or 8,469,000 bushels less. The money value at the farm market was \$27,134,127, against the like valuation at the same time in 1893 of \$28,720,386. The last census made the area of barley for the year (1889) 3,220,795 acres, the product 78,331,492 bushels, or 24.3 bushels per acre. The yield per acre for 1894 was 19.3, or 5 bushels less than that of 1889.

The following table shows the acreage, product and value by states:

States and Territories.	Acres.	Bushels.	Value.
Maine.....	14,326	373,909	\$246,780
New Hampshire.....	5,081	123,976	78,105
Vermont.....	18,124	505,660	303,396
Massachusetts.....	1,821	39,510	24,895
Rhode Island.....	870	11,100	7,992
New York.....	259,788	4,546,290	2,545,922
Pennsylvania.....	16,861	279,893	184,349
Texas.....	2,509	38,388	21,113
Tennessee.....	2,632	86,184	20,263
Kentucky.....	3,763	107,998	50,759
Ohio.....	32,858	936,453	449,497
Michigan.....	75,887	1,552,972	776,486
Indiana.....	7,568	156,658	70,496
Illinois.....	27,570	647,895	310,990
Wisconsin.....	436,398	12,480,983	5,616,442
Minnesota.....	461,304	10,840,644	4,444,664
Iowa.....	497,836	7,716,458	3,240,912
Missouri.....	817	11,438	5,833
Kansas.....	16,164	142,243	69,699
Nebraska.....	59,818	340,963	146,614
South Dakota.....	153,465	721,286	252,450
North Dakota.....	201,921	4,058,612	1,461,100
Montana.....	5,183	116,618	46,647
Colorado.....	12,426	345,443	200,357
New Mexico.....	1,543	41,681	29,163
Arizona.....	9,966	249,150	186,863
Utah.....	6,303	207,999	95,680
Nevada.....	7,790	253,175	129,119
Idaho.....	10,297	335,682	157,771
Washington.....	47,386	1,595,223	510,471
Oregon.....	35,492	1,369,991	452,097
California.....	737,395	11,216,004	5,047,202
Total.....	3,170,602	61,400,465	27,134,127

OUR MILWAUKEE LETTER.

Editor American Elevator and Grain Trade:—A suit at Milwaukee is the result of the Russian barley deal, and the point in question is in regard to its being refused on account of its not being up to sample. The barley was sold out for the account of the buyer, and seller is now suing for damages; \$5,000 is claimed.

The Chicago, Milwaukee & St. Paul Railway Company have deposited a warehouse bond with the Milwaukee Chamber of Commerce and the document has been accepted.

D. G. Owen, of the firm of Owen Bros. Commission Company, Milwaukee, is taking a month's pleasure trip through the South.

There is some talk at Milwaukee regarding a syndicate being formed for the purpose of purchasing the Chamber of Commerce building, also the Mitchell building adjoining it. A short time ago a proposition was before the Chamber of Commerce to purchase the building occupied by them, but the project fell through.

The firm of Tuttle, Greenslade & Olney, doing a mill feed business at Milwaukee, has dissolved.

O. Z. Bartlett (L. Bartlett & Son, grain commission, Milwaukee) and wife are in Cuba at present.

The indications point to a large crop of Chevalier barley the coming season. As prices have been good farmers in the Gallatin Valley, Montana, will sow largely and seem confident of success. A better demand has existed this last season, and more shipped than ever known before, and this has encouraged the raisers of this class of barley. Maltsters and brewers have given the same more attention than they have previously, and Eastern parties have been large buyers. In making beer from the malt of this barley it necessitates a separate brew, hence in buying purchasers deal only in large quantities. A brisk foreign trade has been established and

large quantities have been exported to England and Belgium.

The Schlitz Brewing Company, Milwaukee, Wis., are erecting a \$12,000 packing house at Milwaukee. They are also about beginning to build an office building at Kansas City, and it is to be constructed of pressed brick and stone and its cost will be about the same as the packing house. Plans have been drawn up and accepted for a storage house, bottling department and stable, which will be located at Toledo, Ohio. The cost of these buildings will be about \$15,000.

Henry Rahr & Sons, brewers, Green Bay, Wis., will build a \$25,000 brewery and storage house at that city.

The Valentine Blatz Brewing Company, Milwaukee, Wis., are building a boiler house at a cost of \$30,000, and also remodeling an ice machine building at \$9,000.

Milwaukee, Wis. M. S. LOWRY.

BARLEY TO DISPLACE WHEAT.

The Maryland state experiment station has been making some experiments with barley as a substitute for wheat with very favorable results. Comparing the profits of barley and wheat, it was found that the barley netted \$12.63 and the wheat \$5.51 per acre from yields of 50½ and 36.7 bushels respectively. Among the advantages of barley as a substitute for wheat are, the same time of seeding the crop and the same method of harvesting, involving no change of crop rotation; a larger yield of stock food and earlier ripening and removal of the crop from the land, insuring a better stand of the clover or timothy sown in the spring. In this last point barley has a decided advantage over wheat or oats. It is out of the way when the young clover or grass needs all the available moisture. At their later time of ripening wheat and oats in a drouthy season pump up all the soil moisture, leaving the young clover and grass to perish.

On the Pacific Coast barley is the favorite grain food for farm animals. Large quantities of it are fed whole, but the rolled barley, made by passing it through one pair of rolls, is in far superior form for feeding than the whole grain.

GERMANY'S BARLEY TRADE.

The Berlin correspondent of the *Corn Trade News* writes that agriculturists are already paying more attention to the cultivation of barley than to that of breadstuffs, which appear to be less profitable to them. But they are still falling behind in the barley cure, inasmuch as, in spite of their strenuous efforts, they have not yet succeeded in producing a barley the quality of which is equal to that of the better foreign sorts, such as Hungarian brewing barley, etc. Under these circumstances the latter is bringing 2 to 3 marks more than the best Bavarian barley, but the import of Hungarian brewing barley is still comparatively small. Russian barley, which, for the most part, is only fit for feeding, only small quantities being fit for brewing purposes, cannot bear comparison with Hungarian brewing barley, which fact finds expression in the prices, Russian barley being 6 to 8 marks cheaper than Hungarian.

The following is a record of the average prices of barley per ton (in marks) for the last five years, at Munich, the principal beer center of Germany:

	Hungarian Brewing Barley.	Russian Brewing Barley.	Difference in favor of the Hungarian Brewing Barley.
1890.....	224.	209.15	+14.85
1891.....	213.30	195.94	+17.36
1892.....	204.59	179.	+25.59
1893.....	203.79	176.	+27.79
1894.....	199.	170.21	+28.79

Hungary is furnishing annually about 1,000,000 to 1,200,000 quintals of brewing barley to Bavaria (of course, partly through the medium of Austria), 150,000 to 200,000 quintals to Saxony, and 400,000 to 500,000 quintals to Prussia; the whole Austro-Hungarian monarchy (Austria and Hungary) exported in 1894 3,448,492 quintals to Germany.

Following are the countries which contributed to the barley requirements of Germany in 1894: Austria and Hungary, 3,448,492 quintals; Russia, 5,303,917; Roumania, 1,931,166; Bulgaria, 46,948; Denmark, 71,470; Holland, 98,110; other countries, 74,867; total, 10,975,970.

Queries and Replies.

Questions and answers are inserted under this head free of charge, and all are invited to avail themselves of this column.

No. 12. Where Can Mixer Be Obtained?—Has anyone invented a machine for mixing grain as it is run into the car? I want one that will do it thoroughly. If anyone will inform me where I can buy one, or will give me drawings of same so that I can have one made, I will consider it a great favor.—SHIPPER.

No. 13. Specialty of Country Elevators.—I would like to obtain the names of some architects and elevator builders that make a specialty of country elevators. If the AMERICAN ELEVATOR AND GRAIN TRADE will give me this information it will oblige one of its subscribers.—P. H. PLANK, Bringham, Ind. [ANS. See the advertising columns of this issue.—ED.]

No. 14. To Stop Belt Carrying Grain Back.—We would like to learn through the AMERICAN ELEVATOR AND GRAIN TRADE how to stop a drag belt from carrying grain back and spilling it on the ground. We have two belts, and after dragging ten or twelve carloads of grain out of the bins there will be a wagonload of grain under the elevator at the far end of the belt. We would like to hear from someone on this subject.—SUMNER & SONS, Milford, Ill.

DOTS AND DASHES.

Flax is beginning to be an important crop in Eastern Washington and Idaho.

Tacoma's wheat shipments this season are expected to be about equal to those of last year.

Quebec is said to have a large quantity of surplus hay left over, and holders are anxious to ship at the first opportunity.

The Santa Fe has resumed through billing of grain on some of its lines, levying an arbitrary charge of 1 cent per 100 pounds.

The Steuben County, New York, Hay Dealers' Association held a meeting at Bath, N. Y., February 20, to transact customary business.

At the trial of Daniel Considine for stealing grain from the K. C. & N. W. R. R. at Kansas City, Kan., the jurors disagreed, though eleven of them stood for conviction.

Two boys arrested for stealing wheat from Gilbert E. Read of Richland, Mich., have been sentenced to 90 days in the house of correction. Let the good work go on.

Corn is a problem. Reports indicate a shortage in the West, a falling off in consumption in the East. Meantime it continues to pile up in Chicago, becoming a bigger and bigger puzzle.

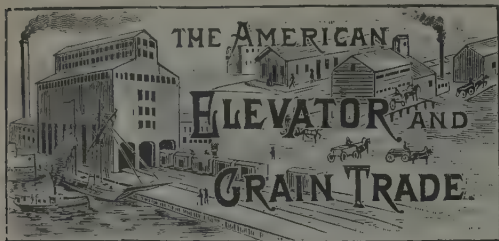
It is said that several million bushels of potatoes are annually imported into the United States which should be raised by farmers of Western states at an average profit of 60 cents per bushel.

Although the grain shovellers at Buffalo made some protests against Kennedy's contract with the Lake Carriers' Association to handle all grain in the port, work has been going on without interruption.

The National Rice Milling Company of New Orleans, La., has completed and is now operating its rice elevator, and other elevators will be erected. This move ought to be important to elevator builders.

The Farmers' Alliance of Minnesota has placed before the State Grain and Warehouse Commission a national grain transfer and weighing company scheme. It is proposed to erect a plant at Minneapolis similar to those at Chicago and other points, and to preserve the identity of grain from various sections and dispense with mixing.

Grain men claim that, notwithstanding the substitution of every sort of motive power for horses in New York, as much oats is going into use as ever. One authority in New York thinks the consumption of oats in that city since the last crop had been the largest ever known, but all are of the opinion that the consumption of corn had been reduced.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

MITCHELL BROS. COMPANY

(INCORPORATED.)

OFFICE:

Howland Block, 184 and 186 Dearborn St.,
CHICAGO, ILL.

Subscription Price, - - - - \$1.00 per Year.

English and Foreign Subscription, - - - 1.50 " "

English and Foreign Subscriptions may be sent to W. H. Smith & Son, 186 Strand, London, W. C., Eng.

A. J. MITCHELL, - - - Business Manager.

HARLEY B. MITCHELL, - - - Editor.

CHARLES S. CLARK, - Assistant Editor.

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MARCH 15, 1895.

HANDLING CONSIGNED GRAIN.

Complaints have been made by country grain shippers that the commission men were getting the big end of the deal, in fact were the only ones who were getting a profit out of the grain business. The expenses for help, rent and telegraph service are large and the commissions are small, and the statements of commission men in different markets, which are published in this number, show that the commission man risks from 75 to 100 per cent of the value of the grain from the time draft is honored to the sale of the grain. Many commission men honored drafts on shipments months and years ago which have not yet arrived, although the money has not been returned and the whereabouts of the shipper is still unknown. The shipper under the general practice of the present day has only 25 per cent. of the value of his grain at risk and frequently has nothing at risk as he draws for the full amount of the value of the grain, which must be paid before the receiver can get the bill of lading. The shipper is the dispenser of business and the competition among the commission men for his favor has been so great that they have left little profit in the business for themselves.

In days long past the shipper did not make drafts against his shipments, and in some cases he does not do it now. When he does not draw against his shipment he has the entire value of the grain at stake and sometimes he loses. Large offers of unknown brokers attract shipments now and then and in about ten days the shipper makes a vain search for the grain and broker. The shipper cannot always determine what the grade and weight of his grain will be at destination, but this is left to the decision of disinterested parties.

The fact that 90 per cent. of the grain received at Toledo is bought outright by the re-

ceivers shows that there is no big thing in the grain commission business. The profits in the business for the country grain buyer may also be small, but if such is the case he has himself or the one or two buyers he has to compete with to blame.

THE CENTAL OR THE BUSHEL.

A correspondent in the February issue strained his imagination in an effort to find a reason for retaining the antiquated bushel as the standard unit of measure in conducting transactions in grain. There are no arguments in favor of the use of the bushel that have any merit as compared with the overwhelming facts in favor of the cental, which is now used on the Pacific Coast, by the seed trade, in Liverpool, and in France and some other places where a desire for the best is strong enough to overcome a love for the old.

The grain tables may save time and energy to those who use the bushel as a standard unit of measure, but the adoption of the cental would do away with both the bushel and the tables and save much more time to everyone connected with the trade. No reductions would be necessary and the dealer would know the quantity of grain in centals the minute he saw its weight, for instance, a wagon load weighed 5,321 pounds or 53.2 centals. No system is so simple as the decimal system of weights and measures, and its adoption by the grain trade would not only save time, labor and money, but its use would greatly reduce the number of errors and facilitate all transactions in the grain trade.

The charge that the adoption of the cental as the standard unit of measure would destroy the value of statistics in comparisons is true, but new statistics could easily be compiled from the old tables to show the quantities in units of the new system. The bushel used by the grain trade is not a measured bushel, but a definite number of pounds which varies with different grains in different states, so that there is such a lack of uniformity as to make comparison in many cases impracticable.

If the 100 pounds was used as a unit of measure the crops and stocks would not seem so enormous to the speculator and the price would not seem so small to the farmer. If there are any dealers who are opposed to changing to the cental system we would like to have their views on the subject, and their reasons for being opposed to it. The champions of the cental system are numerous and the first organized attack they make on the old bushel will sound its death knell.

THE FARM RESERVES OF WHEAT.

The March report of the government statistician as to the farm reserves of corn and wheat was not only a surprise, but it met with an unexpected amount of credence by traders. Notwithstanding that the government estimate was widely at variance with the "tips" and private estimates, there seemed less disposition to contest its figures than might be expected. The figures were practically bearish on corn; but on wheat the effect was to send it up three cents on the first day and still higher on third day after a slight relapse on the second day.

If the figures are trustworthy, the bull movement has ample justification. The farm reserves of wheat are given at 75,000,000 bushels, or only 16.3 per cent. of the crop, with a current cash price of 52½ cents. In 1894 the reserves were given at 114,000,000 bushels, which was 28.8 per cent. of the crop, with a cash price of 58½ cents. In 1891 the reserve was given at 112,000,000 bushels, and although this was 28 per cent. of the crop, the current cash price was 94 cents. In 1892, with an enormous reserve of 171,000,000 bushels, the price was 87½ cents.

Of course it cannot be argued that the price of wheat must enhance largely solely because

the farm reserves are small; for they are not the only arbiters of prices. But that they are so much smaller than many have counted on, even those who deem themselves so well acquainted with the statistician's methods and figures as to give "tips" on what he is about to promulgate, constitutes a legitimate bull argument. Much will depend on how Europeans respond to the situation. Even if they are impressed with the certainty of higher prices, they are likely to buy quietly for awhile, at least. A week's time will tell whether wheat will pull itself up or settle back into the slough of despond, where it has been floundering for two years.

"BARLEY AND MALT."

Under this head we give our readers a new department this month, one which, we have little doubt, will grow to generous proportions. It is not our purpose to detract a particle from the present scope of the paper, or to publish less matter of interest to other branches of the grain trade; rather than do this we will add to the size of the paper as many pages as may be necessary. But we have found that the barley and malting interests naturally form a part of our legitimate field, and we already number many subscribers among the barley dealers and maltsters. Advertisers who have obtained good results from our columns, in this special field, have also urged this step upon us, which has not been taken without due deliberation.

We invite all who are interested in this new departure to contribute to its success by sending us items of news or contributions of interest to the trade. We want their co-operation to make this feature of the AMERICAN ELEVATOR AND GRAIN TRADE a success.

DATE OF ASSESSING GRAIN.

The wisecracks in several state legislatures have introduced bills providing for the assessment of grain at a date earlier than has been the custom heretofore, the purpose being to get as much out of it as possible before it gets outside the state.

One justice-loving statesman of Minnesota has introduced a bill providing only for the assessment and collection of taxes on grain stored in elevators situated on the right of way of railroads. The elevator man who owns the site of his house, the miller and the farmer will escape the fair regulations of his bill should it become a law. Such discrimination is unconstitutional; however there is little prospect of the bill becoming law.

The tax legislators who seem to fear that grain will not be taxed should have a care lest in their eagerness they cause it to be taxed twice in the same year. If states of production tax grain on the first day of March or even February and states having central markets tax it on May 1, the chances are that some of the grain produced will be taxed in both places, which is decidedly unjust to the producer and dealer.

Grain should be assessed the same day in all states so as to avoid double taxation. When they can ship it out of the state and escape taxation they rush so much to market at the same time that it has a depressing influence on prices, and they often lose more by the decline than the taxes would have amounted to. If the grain was assessed the same day in all states there would be nothing gained by shipping it out of the state. In the long run the producing states would receive more from such taxation and there would not be such a marked increase in the stores at central markets just before assessing time.

It may be said that the country holder would ship just as at present in order to throw the taxes upon the city buyer, but they forget that buyers are just as shrewd as shippers, and knowing that they would have to pay the taxes would

buy only at a figure low enough to make good the taxes or else hold aloof from the market. The reduced demand and the increased supply at such markets would affect prices sufficient to discourage great activity in shipments.

SOME people are beginning to claim that the Argentine Republic is a good deal of a myth in the matter of wheat production. It is not exactly denied that Argentina produces wheat; but the fact is pointed out that previous to 1893 she never produced a crop of 20,000,000 bushels; that in that year her crop was about 57,000,000 bushels, or no more than some of our states have produced. Moreover, it is shown that even if the production of wheat should rise to 100,000,000 bushels, that would only be between four and five per cent. of the world's total wheat crop. This is all true; and doubtless the importance of Argentina may have been magnified, as has that of every new wheat producing section of the world, at the first, as Algiers, Egypt, Australia, Manitoba and the rest. But the trouble is that so much of the Argentine crop is "surplus." That's where it hurts.

PESTS IN STORED GRAIN.

Elevator men who find insect pests in their grain can now avail themselves of the knowledge and advice of a competent entomologist, not only without cost to themselves but without danger of publicity. Very naturally men hesitate to advertise the fact that their warehouses are either infested or likely to become infested with weevil or anything of the sort; and this hesitancy about seeking relief has often intensified the trouble.

An arrangement has been made with Prof. W. G. Johnson of Champaign, Ill., by which inquiries respecting pests in stored grain or mill products may be forwarded directly to him. They should be accompanied with specimens of the creature and samples of the material in which it is found. Prof. Johnson will prepare replies to such inquiries, which will be published in the *AMERICAN ELEVATOR AND GRAIN TRADE*. This will save labor on the part of Prof. Johnson, as many of the pests submitted are identical, and personal and confidential replies in each case devolve a large amount of labor on Prof. Johnson. Names will be withheld and no charge will be made, so Prof. Johnson can be addressed in perfect confidence. Not even the publishers of this journal will know who sent in the inquiries. Elevator men should avail themselves of this opportunity. They can help themselves by so doing, help their fellows as well and assist science.

WITH A NEW NAME.—The firm of Huntley, Cranson & Hammond of Silver Creek, N. Y., so well known as manufacturers of grain cleaning machinery, has been incorporated and is now known as Huntley Manufacturing Company. It is officered as follows: President, W. W. Huntley; vice-president and treasurer, C. G. Hammond; second vice-president, F. L. Cranson; secretary, B. F. Ryer. We hardly need comment on the personnel of the company as all of them are familiar figures in this special field. Mr. Huntley is a mechanical expert and inventor of acknowledged ability who has made special machinery a life study. Mr. Hammond was a member of the old firm of Huntley, Cranson & Hammond from its organization, and has always attended to the financial matters of the firm. Mr. Cranson will have the general management of all outside matters of the company. Mr. Ryer, the new secretary, has for several years been the general agent of the company with headquarters in Chicago. He brings to his new position years of experience and a wide acquaintance in the West. The success of the Monitor Separators and Cranson Scourers has been so pronounced as to excite universal comment. The manufacturers have

never been of the kind to rest on their oars and let their machines take care of themselves. They have ever been progressive and have not hesitated to make expensive changes when satisfied that such changes would improve their machines. The new company succeeds to a splendid business, with their machines already widely known and appreciated, the results of the honest endeavor and business sense of the old firm. That the new company will maintain the high standard set by Huntley, Cranson & Hammond will not be questioned. They have the good wishes of a wide circle of friends for continued prosperity.

RIGHT TO EXAMINE GRAIN IN PUBLIC ELEVATORS.

The Chicago Board of Trade has made another move against the public elevator men and lost. A committee was appointed to inspect the grain in store and then the elevator men were asked to permit the inspection, which they refused. The whole transaction amounted to a base insinuation as to the honesty of the elevator men. The object of the inspection was ostensibly to investigate the quality of the grain, but it was the intention, also, to learn if the total amount of grain reported in store was there. The elevator men are under bonds to make good their warehouse certificates, and as to the quality of the grain they have nothing to do. The law requires that they accept the brand of quality put upon the grain by the state inspectors, and prohibits the mixing of grain of different qualities.

If anyone assumes to act as an inspector without being duly appointed and sworn in he will be fined. The owners of the grain and authorized inspectors have the right to examine the grain. The law provides that

All persons owning property or who may be interested in the same, in any public warehouse, and all duly authorized inspectors of such property, shall, at all times, during ordinary business hours, be at full liberty to examine any and all property stored in any public warehouse in this state, and all proper facilities shall be extended to such persons by the warehouseman, his agents and servants, for an examination; and all parts of public warehouses shall be free for the inspection and examination of any person interested in property stored therein, or of any authorized inspector of such property.

It is not to be doubted, however, that the owners of grain in any public warehouse can delegate anyone they choose to examine the grain for them. The warehouseman is a custodian only, and has no voice in the matter as against the owner, but he must protect the property from others, and especially from prejudiced persons who could in any possible manner slander the property to the loss of the owner.

The feigned fear that the warehousemen will sell the wheat to the trade next May and then post it is pure buncomb. The elevator men have considerable money invested in the business and expect to continue the warehouse business, so will do nothing unfair or unlawful.

IN common with a wide circle of personal and business friends, we are both glad and sorry to lose from Chicago Mr. B. F. Ryer, who goes to Silver Creek, N. Y., to take the secretaryship of the Huntley Mfg. Co.; glad because Mr. Ryer receives a well-deserved promotion in the manufacturing world, and sorry that this advancement necessitates his removal from the West. Mr. Ryer has been identified with the mill furnishing trade for many years, more recently as general agent for Huntley, Cranson & Hammond, and is one of the ablest men in the business. He goes to his new duties thoroughly equipped and we have no doubt will contribute still further to the success of the machines which he has done so much to popularize in the West. Silver Creek gains a good business man and an excellent gentleman at Chicago's expense. Mr. Ryer will be followed to his new

home by the good will and best wishes of scores of friends.

THE Washington farmer legislators are having a very exasperating time at Olympia, where four or five have been persistently striving for several weeks to have each his own grain inspection bill enacted into law. If the Washington legislators were willing to profit by the experience of the older states in this business they could get copies of good laws and learn of the few defects with little effort and some profit to themselves.

THERE is a man down in New York who ought to find no trouble in getting a job at most elevators. If the stories told about him are true he is the champion human car pusher. His name is George G. Spriggs and he has a record of pushing a loaded car weighing 50,900 pounds. The people who know all about such things say that the best record hitherto made was in 1891, when John Whitman pushed a loaded car containing 35,000 pounds a distance of 30 feet at the Hudson River R. R. depot in New York. Spriggs weighs 170 pounds and thinks he will make a record of 90,000 pounds before he gets through.

A CINCINNATI correspondent suggests that the exact amount of grain contained in each car upon arrival should be plainly stated in the warehouse certificate. His statement relates to points where the weighing and grading are done after the grain has been cleaned. In justice to buyer, as well as seller, a clear statement of the condition and weight of the grain upon arrival should be given unless it is ordered cleaned, and even then such a statement would not be objectionable. A warehouseman has no right to change the weight or quality of grain without explicit orders from the owner, and if he does change it, he does so at his own risk of loss.

THE roofing problem is ever important, and the roof that is not proof against rain, wind and heat fails of its purpose. One way of accomplishing this is the use of the dark red slate roofing paint, which will make, it is claimed, substantially a new slate roof out of an old shingle affair. It has a heavy and durable body, but is easily applied by anyone; will neither rust nor corrode, and enables the owner to save his roof at a low cost. Slate paint is elastic and flexible, water and spark-proof, and contains no tar. For new roofs rubber roofing is claimed by the manufacturers to have all the merits of metal, all the virtues of slate and all the good qualities of shingles at half the cost. Careful estimates promptly given if you state size of roof. Send for book circular (free if you mention this paper) to the Indiana Paint and Roofing Company, 42 West Broadway, New York City.

MR. FRAZIER tells how the syndicate that bought the burned wheat at Toledo got rid of it. It was necessary to act promptly, and they treated the 600,000 bushels of wheat more or less burned and wet, as if it were a bankrupt stock. They sent parties out along the nine roads that diverge from Toledo, telling what they had to sell and advising those who wanted to buy to act promptly. They received a lot of requests for samples; but of course samples were out of the question. The least desirable portion, which was deteriorating in value hour by hour, was disposed of first, at whatever it would bring. This gave time to handle the portion that was only slightly injured, to advantage. They made some money. In fact speculations in buying the grain of burned elevators seem to terminate well almost invariably. A heap of grain apparently badly burned, if rightly handled, will develop surprises on its interior.

EDITORIAL MENTION

THE members of the grain trade are weak as against the abuses which encumber it, because they are not organized.

THE Missouri Legislature will probably fix a maximum of 40 cents a car for grain inspection. This should be sufficient.

IF you favor the adoption of the cental of 100 pounds as a unit of measure let the trade know it. You are welcome to the use of our column.

THE Pooling Bill failed to pass the Senate and the railroads will have to commence all over again next December if they want pooling legalized.

GRAIN dealers who have handled linseed oil cake and cottonseed oil cake have secured a good profit on the money invested without much inconvenience.

EVERYONE connected with the grain trade should champion the cause of the cental and simplicity. The bushel and the complex reductions which its use necessitates should be discarded.

IF you are desirous of being guilty of contributory negligence in the matter of shortages in grain shipments do not exercise great care in cooeping your cars and accept any old wornout car that the carrier offers you.

INADVERTENTLY, in the last number we credited the cartoon of Superior sweeping the elevators off the earth to a contemporary of the Superior *Evening Telegram*, which was the originator of the idea and the illustration.

THE Chicago Board of Trade will, no doubt, pay a large sum to anyone who will discover a reliable method for determining the age of grain. Applicants will be required to deposit a bond of good faith with every plan presented.

RECEIVERS at other points should profit by the example of the Cincinnati receivers who organized against the long-time credit evil and are having such remarkable success that they mourn now only because they did not organize before.

GRAIN dealers can exchange reports of the acreage and condition of the growing crops and of the stocks in store and farmers' hands by contributing to our department devoted to "Crop Conditions." We are always pleased to receive such reports for publication.

To judge from the reports of millers, wheat feeding has not fallen off so much as many have believed. Some millers report that the business built up in the eastern dairy districts is continuing as if it meant to be a permanent thing. Evidently wheat feeding is to be the future regulator of wheat prices to a very large extent.

CINCINNATI receivers have elected the following officers of their Grain, Hay and Feed Association, which was organized recently to secure prompt payment for produce sold to local dealers: J. N. Wooliscroft, president; Joe Van Leunen, secretary, and W. W. Granger, treasurer. Each member has deposited \$50 with the association, which will be forfeited if he is

caught giving local dealers credit in excess of 48 hours after bill has been presented.

THE stocks of wheat reported in private elevators a week ago was 3,886,000. There is nothing startling about these figures, except that they are as large as the figures used to be for the public elevators. The congestion of wheat at Chicago the past few years has been one of the most marked changes in the grain trade.

AN Indiana grain dealer has been fined \$250 and sent to the penitentiary for three years for defrauding farmers. His elevator was at a little town near Wabash, and two years ago he shipped out 10,000 bushels of stored wheat belonging to farmers, got the money on it and absconded. It was a plain steal and the jury took that view of the case.

THE changing of the North Dakota law making grain in that state assessable March 1 instead of April 1 caused a marked increase in the receipts of wheat at Northwestern markets the latter part of February. The farmer who holds his grain pays taxes, interest and insurance and runs the risk of declines and of having it stolen or destroyed by weevils. Yet they will hold it.

A BILL has been introduced in the Illinois Legislature requiring public warehousemen of class A to keep separate bins for the use of grain depositors. This looks like a move to legalizing the keeping of their own grain in their own houses by public warehousemen. If they desire to operate their elevators as private storehouses they can do so; no one will object.

WHEN a shortage occurs in your shipment do not hesitate to make it known to carrier and receiver. Swearing at the office clock will avail you naught, and unless you send a statement to your receiver he will not attempt to discover the leak. Shippers will increase their chances of getting correct weights by tacking a card on the outside of each of the side doors, bearing the weight and kind of grain and the car initial.

A RECORD of wheat prices in France since the commencement of the present century shows that the average price for 1894 was not the lowest of the century. It was considerably lower in 1850 and 1851, and as low in 1809, 1834, 1835 and 1849. The worst three consecutive years in wheat prices were in 1849, 1850 and 1851. The highest price was in 1817, when the price was two and a half times the average of last year.

THE men on the Chicago Board and New York Produce Exchange who had "points" on the March government crop report will have less confidence in the future in the "pointers" than in the report itself. The "point" was that the report would show reserves of 124,000,000 bushels. A difference of 50,000,000 bushels has destroyed the reliance hitherto placed in the ability of the guesser. Anybody can do as well as that; and few could do worse.

THE so-called Agrarian party in Germany, composed of the landholders and cultivators, seem bent on making trouble for American agricultural products. Among the recent propositions put forward by the Agrarians are state grain elevators and state flour mills. An increase of duties is being agitated on foreign agricultural products, along with another pet project for the control by the state of all grain imported. The scheme only needs supplementing by having the government take hold of the farms as well. Then the fun would commence. No government on earth could load itself up with such responsibilities as the Agrarians propose, and last.

It would become the butt for all the complaints that at present are divided up. Nevertheless, the evident purpose is to shut the Americans out as competitors in agricultural products.

THE private snap crop reports do not seem to inspire any great degree of confidence. On Saturday, March 2, those who are on the inside of the Chicago concern sold wheat on the strength of the tip what the report of the concern would be as to the amount of wheat in farmers' hands. On Monday the figures were given out—165,000,000 bushels. The market refused to believe the private concern's figures and went up and the fellows who sold on Saturday bought back again Monday.

THE project of building a state elevator at Duluth has received its quietus, at least for the present, by the action of the Minnesota legislature. The warehouse committee reported back without recommendation the proposal to amend the constitution so as to permit of building the elevator. Whereupon it was moved to indefinitely postpone the matter and this was carried by a two-thirds vote. The state still has its valuable elevator site at Duluth; but it better have the site than the elevator on its hands.

SEVERAL grain transfer elevators are being erected at different junction and terminal points, but the supply will still be very short. All through shipments should be transferred from car to car by means of a regular transfer elevator so the identity of the grain can be preserved. Often the identity of grain is lost when going through a storage elevator. The weights secured on track scales or by grain transfer cars are not reliable. The shovelers or transfer cars cannot transfer the grain as easily or quickly as the transfer elevator.

THE Chicago, Grain Receivers' Association has not yet succeeded in having public weighmen placed in all the public elevators, and some seem to doubt that they have tried. In justice to those who ship to this market as well as those who buy in this market a public weighman should be placed in each of the public elevators. The state should have a law providing for the weighing of all grain received or shipped from a public house by a public weighman. The management of the weighing department by the Board of Trade is all right and no change is desired by anyone connected with the trade.

THE Cincinnati Chamber of Commerce proposes to inaugurate a reform in the weighing of grain received in that city, and to have all grain shipped in and loaded from cars into wagons weighed by public weighmen. Heretofore it has been customary for the purchasers of corn to load into wagons for delivery only such as is in good condition, and whole upon the ear, when shipped in ear. This is an injustice to the shipper. The report made to the shipper is generally short of his own weight and he declares he has been a victim of short weights. If Cincinnati covets a reputation for short weights this practice should be continued.

A PECULIAR lawsuit has been tried in Iowa, in which ex-Congressman Weller, familiarly known as Calamity Weller, figured. Mr. Weller owns a farm and last summer some hay was burned by sparks from a locomotive on the railway which crosses one corner on the farm. He filed a claim for damages and was allowed nearly \$300. The hay was also insured in the Chickasaw Farmers' Insurance Company, which also paid \$100 on the same hay. When the insurance company learned that Mr. Weller had been paid by the railway company it commenced an action to recover the \$100 it had paid. He took the ground that there was no difference between his case and that of a person injured by an

accident who was insured against accidents. The court, however, ruled against Mr. Weller and the latter has appealed the case to the Supreme Court.

THE cry of the farmer for seed wheat should be changed to corn, rye, oats, barley and flaxseed, anyone of which has been bringing a better price than wheat.

THE Illinois Railroad and Warehouse Commission has cited the public elevator men, who are charged with violating the law by dealing in grain stored in their own elevators, to appear before it March 26 at Chicago.

MORE farmers are being worked by seed swindlers, who play the same old game of the Bohemian oat swindlers, this year than for several seasons past. Country dealers would advance their own interests by warning the farmers against the game of these sharks and by supplying farmers with first-class seed at a reasonable price.

AN effort is being made on the Chicago Board of Trade to limit trading in grain other than corn to three months; that is, to limit sales to the month in which the sale is made and to the two succeeding months. This will make the short seller more conservative, as he will have less time in which to fill his contracts.

A BILL has been introduced in the Minnesota Legislature which provides that all common carriers shall provide at all points of connection, crossing or intersection, when it is practicable and necessary in the interest of traffic, ample track connections with intersecting lines for the transfer of the regular business of their lines, and prohibits any discrimination on freight forwarded to another line for shipment. It is not often that a carrier will refuse to put in a connecting switch if there is enough prospective business to warrant the improvement, and when there is not enough business to make it pay it should not be ordered. Unprofitable branches make it necessary for carriers to retain higher rates on through freight.

THE LAW ON ROUTING FREIGHT.

The suggestion that, under certain existing conditions, the right to route certain freight belongs to the carrier, and ought not to be surrendered to the shipper, apparently strikes some of our readers as new law. But it is not. It is only an application of well-known principles of the law pertaining to contracts and common carriers to the case in hand, as the lawyers would say, to wit, when carriers of through freight, instead of limiting their contracts to their roads, assume the responsibility for the rate through to destination.

A common carrier is not required by law to do anything but receive, safely transport and in due time deliver at a point on its line; unless, as agent or otherwise, it holds itself out, or expressly agrees, to do more than that. Nor can it, except it does so, be compelled to issue a bill of lading for a point beyond its line.

The shipper's right is primarily to absolutely control his shipment. This, of course, includes the right to route his shipment as he pleases. He can require the initial and each subsequent carrier to take his shipment and deliver it to a specified connecting carrier, until it reaches its ultimate destination, but he must pay each carrier its full legal charge and cannot exact a through bill of lading. And this is the extent of shipper's inherent legal right to route his shipments.

But this is not the case under discussion. And right here is an important distinction to be made. The subject in hand is the "routing of what is known as through traffic;" traffic where a through rate is named and on which a through bill of lading is issued. The initial carrier which quotes the one and issues

the other has the right, until it in some way waives it, of making it a condition precedent that it shall route the shipment. Where, however, a carrier has published billing or other through shipping arrangements with several connecting carriers, by all of which it advertises or in some other way offers to send shipments at the same rate, the shipper might then choose his route from among such carriers; but before he can do so the initial carrier must have waived its right to route the shipment to just that extent.

The naming of a through rate should be conditioned upon the right to direct the route, and it should be understood by shippers that if they wish to designate the particular roads over which their property is to be transported, they must pay the local rates in force on the several lines between termini. The initial road naming a through rate has the undoubted right to control the routing of the freight, and it should exercise that right. This is maintained to be not only sound common sense, but it is based upon law—an old law at that.

There are not many decisions of courts of last resort on this precise point. But as before stated, there are elemental principles which control the subject, and they need not be otherwise referred to than as we have here referred to them. Perhaps the latest decision of any on the subject is that of the Court of Civil Appeals of Texas, in the case of the Wells, Fargo & Co.'s Express vs. Fuller. It holds that it is the privilege and right of the shipper to route his shipments. If he fails to exercise this right then, it says, the law fixes the right in the carrier, with certain imposed restrictions or limitations. In contracts of shipment which are silent in their express terms as to the matter of route, the carrier has the right to choose the route; but it must, at its peril, select a usual and reasonably safe and direct route. Authorities for these propositions are here cited, and this is undoubtedly a good statement of the law. But there is no suggestion here, or anywhere else that we know of, which so much as intimates that a carrier can be forced to make contracts in the class of cases we have dealt with. Indeed it is only a year since the Supreme Judicial Court of Massachusetts held in the test case of the Attorney General vs. Old Colony Railroad (160 Mass. 62) that a statute which authorizes one railroad to determine the conditions on which another railroad must carry passengers, and compels one railroad to carry passengers on the credit of another, is unconstitutional, which would be equally true of freight.

No traffic man needs to be told how dangerous to the through traffic of the country would be any other position. The idea of contracting to perform a certain service for a stipulated sum, and then being precluded from choosing the agencies by which it is to be executed, would, if established, prevent the issue of through rates and bills of lading. That railroads for any reason or no reason have heretofore not uniformly insisted upon their rights in this particular, or rather surrendered them, is no argument for a continuance of the practice or any abrogation of their prerogatives.—*Railway Review*.

A HAY CASE.

Some time ago a Montreal firm purchased from a dealer in the country a round lot of hay, described as good No. 2 shipping hay, and instructed him to ship it to New York, where it was intended to be put on board ship for England, says the *Montreal Trade Bulletin*. When the hay arrived in New York it was inspected, and about one-half of it was found to be almost rotten and worthless. In the meantime, the draft for the amount of the hay made by the country dealer had been presented to the firm here and accepted. Consequently when the draft became due, the purchasers here refused to pay it, as they had then discovered the bad hay and the manner in which they had been imposed upon. The country branch bank of course claimed that they had nothing to do with the trade whatever, that being a matter entirely between the buyer and seller, and their duty was to look to the former for payment of the accepted draft. The bank has sued the firm here which bought the hay and accepted the draft made upon it by the country dealer through the head office of the bank here.

LATE CROP REPORTS.

We received the following too late for publication in "Crop Conditions:"

Wm. Hilles of Barnesville, Ohio, under date of March 13, writes us that the wheat crop in that section bids fair for another good crop.

Clugston & Harvey of Ashland, Ohio, under date of March 14, write us as follows: We think the acreage of wheat sown last fall is not quite up to the average. The condition is said by farmers to be poor, while the amount of wheat in farmers' hands is from one-quarter to one-half less than last year.

Beard & Hall of Cleveland, Tenn., under date of March 12, write us as follows: Our farmers are preparing to plant about the usual acreage in corn. Winter oats and clover are all killed. Wheat is badly damaged from freezing. Farmers are planting spring oats extensively. Stocks of wheat and corn are exhausted.

Trade Notes.

A seed business which is not advertised is liable to go to seed.

Jean B. Dore, Laprairie, Quebec, has invented and patented a hay press.

A company to manufacture automatic grain meters has been organized at Homer, Wis.

No seed is more fruitful than that sown in the advertising columns of good newspapers.

The Webster Manufacturing Company of Chicago report that business is good and prospects are bright. They are running full time and with a full force.

Honstain Bros., elevator builders of Minneapolis, have opened a mill and elevator supply house in that city and a branch office in Chicago where G. T. Honstain will look after the interests of the firm.

Tromanhauser Bros., elevator architects of Minneapolis, Minn., write us that they have a number of inquiries for new grain elevators, some of which are for good-sized plants. They report an encouraging outlook for business.

The Steel Storage and Elevator Construction Company has been organized by P. H. and F. M. Roots and others at Connersville, Ind., for the purpose of constructing and erecting pneumatic steel storage and transfer elevators.

The Hicks Gas Engine Company of Cleveland, Ohio, is in receipt of a recent letter from Barnesville, Minn., which speaks in great praise of the Hicks Gas Engine. These engines have given satisfaction wherever they have been placed.

Every man who hopes to attain any great success in his business must be continually improving, growing and advancing. His class and trade paper serves as a text-book on the various points and phases of his business.—*Collector and Commercial Lawyer*.

You occasionally meet a man who entertains you for a half hour with an account of his wonderful abilities, and what he has done and expects to do. The only impression he makes upon you is that he is a born braggart. Again you meet men who do not say a great deal, but who give you, in a few minutes, a keen appreciation of their good sense and solid worth. You sometimes read advertisements that claim the earth, and all their bombast only serves to prejudice you against the advertiser. Again you see advertisements that do not claim half so much, but which carry a conviction of solid worth and merit with every sentence. What makes the difference? Does it not lie in the way in which things are put? A man can maintain a proper amount of self-respect without showing excessive conceit, and an advertisement can be forceful and impressive without being offensive.

The legislative auditing committee of Missouri has found that the state grain inspection department in St. Louis owes to its employees something like \$5,000 in overdue salaries.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since February 15 has been as follows:

February.	NO. 2 RED W. WHEAT.		NO. 2 SP. W. WHEAT.		NO. 2 CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 2 BARLEY.		NO. 1 FLAX SEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
15	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
16	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
17	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
18	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
19	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
20	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
21	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
22	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
23	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
24	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
25	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
26	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
27	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
28	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
1	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
2	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
3	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
4	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
5	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
6	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
7	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
8	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
9	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
10	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
11	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
12	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
13	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
14	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141
15	50 1/2	50 3/4	56 1/2	56 3/4	42 3/4	43 1/4	28 1/2	28 3/4	53 1/2	53 3/4	56 1/2	56 3/4	141	141

* Free on board or switched. † On Track. ‡ Holiday.

For the week ending February 16 Prime Contract Timothy sold at \$5.75 per cental; Prime Contract Clover Seed at \$8.50@8.55; Hungarian at \$1.00@1.50; German millet at \$0.75@1.40; buckwheat at \$1.05@1.10 per 100 pounds. Receipts of hay for the week were 2,875 tons, against 4,199 tons the previous week. Shipments for the week were 290 tons, against 468 tons for the previous week. A quiet and rather dull feeling existed in this market during the past week. The receipts show a material decrease, and the demand was restricted. Local dealers are taking hold sparingly and the inquiry for shipment was almost nothing. Prices exhibited no particular change, ruling easy during the early part of the week and a shade firmer toward the close.

For the week ending February 23 Prime Contract Timothy sold at \$5.75@5.80 per cental; Prime Contract Clover Seed at \$8.55@8.85; Hungarian at \$1.00@1.65; German millet at \$0.75@1.65; buckwheat at \$1.00@1.10 per 100 pounds. Receipts of hay for the week were 5,306 tons; shipments, 662 tons. A moderate business was transacted in this market during the past week. The offerings were liberal and the local demand was fair. Inquiry for shipment continued light. Prices ruled steady during the early part of the week, but toward the close declined 25@50 cents per ton, and the market closed weak at the reduction. Sales of No. 1 timothy ranged at \$10.00@10.50 for fair to choice and \$10.75@11.00 for fancy; No. 2, \$8.50@9.50; mixed, \$8.00@9.50; not graded, \$8.50@10.00; clover hay \$6.00; Illinois Upland Prairie, \$6.00@8.00; Indiana, \$6.25@1.00; Kansas, \$10.00@11.00 for choice to fancy; Wisconsin, \$6.50@8.25; Iowa, \$7.00@7.50 for damaged, \$8.00@10.00 for fair to choice, and \$10.50@11.00 for fancy; No. 1 Prairie, \$5.00@7.00; packing hay, \$4.50@5.00. Wheat straw sold at \$5.00; oat straw at \$4.25@4.75, and rye straw at \$6.00@6.50.

For the week ending March 2 Prime Contract Timothy sold at \$5.80@5.85 per cental; Prime Contract Clover Seed at \$8.80@9.15; Hungarian at \$1.35@1.65; German millet at \$1.30@1.65; buckwheat at \$1.00@1.05 per 100 pounds. Receipts of hay for the week were 4,546 tons; shipments, 530 tons. The market ruled rather dull during the early part of the week. The arrivals were only moderate, and the demand was restricted, local dealers taking hold sparingly until after the first of the month. Toward the close the demand improved somewhat and a firmer feeling prevailed. Prices exhibit no material change. Sales of No. 1 Timothy ranged at \$10.00@10.75 for fair to fancy; No. 2, \$9.00@9.50; mixed, \$7.00@8.50; not graded, \$9.00@10.00; Illinois Upland Prairie, \$5.00 for coarse, and \$6.50@9.00 for good to choice; Indiana, \$6.00@8.00; Kansas, \$11.00 for fancy; Wisconsin, \$6.50@8.00; Iowa, \$7.50@8.00 for coarse and \$9.00@11.00 for good to fancy; No. 1 Prairie, \$6.50@7.00; packing hay, \$4.75@5.00; bedding hay, \$5.00. Wheat straw sold at \$4.00@4.50 and \$5.00 for fancy; oat straw at \$4.00@4.50, and rye straw at \$5.00@6.25 for poor to choice.

For the week ending March 9 Prime Contract Timothy sold at \$5.75@5.87 1/2 per cental; Prime Contract Clover Seed at \$9.00@9.20; Hungarian at \$1.35@1.65; German millet at \$1.30@1.65; buckwheat at \$0.75@1.25 per 100 pounds. Receipts of hay for the week were 4,471 tons; shipments, 353 tons. The arrivals of timothy hay were only moderate and the local demand was good, especially toward the close of the week. Prices ruled steady early and then became firm, but not particularly higher. The shipping inquiry continued light. The market for upland prairie ruled rather dull. Offerings liberal, with the bulk of

the receipts from Illinois and Indiana; very little coming from Iowa. Demand only fair. Prices exhibit no material change, though the feeling was easier. Sales of No. 1 Timothy ranged at \$10.00@11.00, for fair to fancy; No. 2 at \$9.00@9.50; mixed, \$7.00@9.00; not graded, \$8.50@10.00; threshed, \$7.00; Illinois Upland Prairie, \$7.00@8.00; Indiana, \$5.00@8.50; Kansas, \$9.00, for fair and \$11.00 for fancy; Wisconsin, \$5.50@8.00; Iowa, \$8.00@9.50 for fair to good, and \$10.00@11.00 for choice to fancy; packing hay, \$4.50. Wheat straw sold at \$4.00@4.50; oat straw at \$4.00@4.50, and rye straw at \$5.25@6.25.

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the 4 weeks ending March 2, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	2,649,280	2,113,910	431,160	963,540
Corn, bushels.....	158,430	780,690	12,480	687,450
Oats, bushels.....	258,520	231,210	92,900	102,140
Barley, bushels.....	34,800	25,880	24,790	38,300
Rye, bushels.....	5,800	9,850	3,840	2,950
Flaxseed, bushels.....	5,010	7,240	6,020	28,290
Hay, tons.....	2,765	2,637	138	89
Flour, barrels.....	6,036	12,725	535,728	502,533

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the 4 weeks ending March 2, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	39,000	40,200	9,600	18,000
Corn, bushels.....	1,272,170	1,887,300	213,850	552,460
Oats, bushels.....	985,500	1,783,600	845,800	902,000
Barley, bushels.....	240,100	175,700	169,300	133,000
Rye, bushels.....	11,400	13,800	3,600	4,800
Seeds, lbs.....	90,000	150,000	54,000	89,000
Mill Feed, tons.....	540	300	6,192	4,861
Broom Corn, lbs.....	75,000	15,000
Hay, tons.....	1,790	8,450	190	2,065
Flour, barrels.....	29,600	16,650	33,300	14,700
Spirits & Liquors, bbls.	1,505	3,650	17,066	21,904
Syrup & Glucose, bbls.	1,022	1,200	39,690	40,170

RECEIPTS AND SHIPMENTS AT CINCINNATI.

The receipts and shipments of grain and hay at Cincinnati, Ohio, during the month ending February 28, as compared with the same period of the preceding year, were, according to C. B. Murray, superintendent of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	95,510	88,353	70,701	54,192
Corn, bushels.....	413,790	318,788	30,152	86,923
Oats, bushels.....	303,276	207,755	103,182	92,777
Barley, bushels.....	61,049	115,500
Rye, bushels.....	44,873	28,888	11,562	15,455
Clover Seed, bags.....	2,958	3,263	3,248	3,277
Timothy Seed, bags.....	2,158	5,278	2,921	3,802
Other Grass Seed, bags.....	1,562	2,639	5,049	6,083
Hay, tons.....	10,492	5,599	6,213	2,216
Flour, barrels.....	120,234	153,791	92,751	124,124
Malt, bushels.....	45,000	42,010	21,050	37,300

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the 4 weeks ending March 2, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	300,750	858,715	1,950	84,883
Corn, bushels.....	157,300	141,000	3,250	27,300
Oats, bushels.....	536,000	396,000	505,400	327,940
Barley, bushels.....	436,641	1,085,875	178,800	407,698
Rye, bushels.....	76,395	66,000	42,900	42,399
Grass seed, pounds.....	359,253	375,335	170,950	470,552
Flaxseed, bushels.....	7,835	9,498	895	1,740
Broom corn, lbs.....
Hay, tons.....	1,112	950	12	36
Flour, barrels.....	76,050	194,025	200,767	223,089

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during February, 1895 and 1894, of seeds, hay and broom corn:

Repts.	Timothy, lbs.	Clover, lbs.	Other grass seeds, lbs.	Flax-seed, bu.	Broom corn, lbs.	Hay, tons.
1895 ..	2,712,880	287,102	248,000	98,897	295,064	16,926
1894 ..	2,108,728	611,810	281,670	63,233	871,950	20,334
Shipments.						
1895 ..	2,802,772	1,802,078	315,380	48,314	323,706	1,924
1894 ..	3,342,565	2,241,312	836,163	80,077	714,119	3,600

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain at Toledo, Ohio, during the 4 weeks ending March 2, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	200,500	308,000	149,900	26,000
Corn, bushels.....	440,200	337,500	524,900	152,600
Oats, bushels.....	13,400	5,500	1,600	4,000
Barley, bushels.....	3,600	500	400	1,000
Rye, bushels.....	5,000	6,200	13,700	9,600
Clover seed, bags.....	4,086	8,790	16,020	14,649
Flour, barrels.....	4,855	6,981	66,111	34,478

RECEIPTS AND SHIPMENTS AT ST. LOUIS.

The receipts and shipments of grain and hay at St. Louis, Mo., during the month ending February 28, as compared with the same period of the preceding year, were, according to Geo. H. Morgan, secretary of the Merchants' Exchange, as follows:

Articles.	Receipts.		Shipments.	
	1895.	1894.	1895.	1894.
Wheat, bushels.....	59,150	163,800	618,143	401,514
Corn, bushels.....	772,900	2,817,500	380,866	1,861,752
Oats, bushels.....	419,100	345,600	221,499	309,285
Barley, bushels.....	173,250	144,000	8,256	9,039
Rye, bushels.....	18,330	18,800	11,490	10,064
Hay, tons.....	11,265	13,995	2,351	3,523
Flour, barrels.....	59,980	83,920	154,460	160,731

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, March 9, 1895, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Albany		25,000	30,000		5,000
Baltimore	426,000	418,000	226,000	21,000	
Boston	640,000	260,000	178,000	10,000	
Buffalo	2,910,000	95,000	35,000	40,000	432,000
do afloat	295,000	684,000	199,000		
Chicago*	25,053,000	5,027,000	1,229,000	101,000	29,000
do afloat	1,512,000	1,972,000	858,000		
Cincinnati	26,000	32,000	155,000	12,000	66,000
Detroit	1,308,000	152,000	19,000		10,000
do afloat	237,000				
Duluth	11,187,000	1,000	681,000	3,000	91,000
do afloat	85,000				
Indianapolis	111,000	196,000	82,000		
Kansas City	741,000	211,000	265,000	7,000	
Milwaukee	669,000		5,000	8,000	78,000
do afloat					
Minneapolis	16,162,000	19,000	592,000	46,000	54,000
Montreal	596,000	2,000	173,000	5,000	3,000
New York	6,802,000	337,000	520,000		52,000
do afloat	1,739,000		209,000	34,000	306,000
Oswego	33,000				36,000
Peoria	208,000	376,000	305,000	1,000	
Philadelphia	208,000	334,000	236,000		
St. Louis	3,642,000	2,663,000	419,000	2,000	19,000
do afloat	112,000				
Toledo	2,609,000	868,000	15,000	2,000	
do afloat	299,000				
Toronto	41,000		16,000		36,000
On Lakes					
On Canals	47,000		60,000		
On Miss. River		120,000	1,000		
Total	77,717,000	13,792,000	6,408,000	297,000	1,217,000
Corresponding date, 1894	74,507,000	19,347,000	2,489,000	498,000	976,000

*Including grain in "Armour O" and National elevators.

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector George P. Bunker the grain received at Chicago during the month of February, 1895, was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			No G'de.
	2	3	4	2	3	1	2	3	4	
C. B. & Q.							24	2	1	
C. R. I. & P.				1	2		6	8		
C. & A.				1	8		5	14	1	
Illinois Central			1	18	2		13	8	1	
Freeport Div.							1			
Galena Div. N. W.							1			
Wis. Div. N. W.							8	11	1	
Wabash				1			6	8		
C. & E. I.	1							1		
C. M. & St. P.										
Wis. Central										
Gr. Western										
A. T. & S. Fe.	1			2	36		9	11	1	
Through & Spec							130	2	2	
Total each grade	1	1	1	23	48		202	66	7	
Total W. wheat										349

SPRING WHEAT.

Railroad.	Colorado	2	3	4	No Grade	White	Mixed
	2	3				2	3
C. B. & Q.							
C. R. I. & P.			2				
C. & A.							
Illinois Central							
Freeport Div.							
Galena Div. N. W.	6						
Wis. Div. N. W.							
Wabash							
C. & E. I.							
C. M. & St. P.							
Wis. Central							
C. Gr. Western							
A. T. & S. Fe.							
Through & Special		37					
Total each grade	6		89			1	
Total sp. wheat		6					90

OATS.

Railroad.	White.			2	3	White Clipped	No G'de.
	1	2	3			1	2
C. B. & Q.	492	104	101	19			
C. R. I. & P.	146	73	31	40			2
C. & A.	28	41	38	4			
Illinois Central	199	28	159	18			2
Freeport Div.	173	57	8	4			
Galena Div. N. W.	139	74	57	13			
Wis. Div. N. W.	87	13	3	5			
Wabash	100	7	59	11			
C. & E. I.	31	12	46	24			
C. M. & St. P.	313	59	59	13			
Wisconsin Central	2	6					
C. Gr. Western	74	64	30	9			
A. T. & S. Fe.	44	32	69	6			
Through & Special	136	70	86	17			1
Total each grade	1,964	640	741	188		2	10
Total oats							3,540

CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3				
C. B. & Q.	6	116	1	9	7	73	12	
C. R. I. & P.	4	35		15		50	3	
C. & A.	30	345	19	90	35	338		
Illinois Central		794	9	277		274	130	
Freeport Div.		5				2		
Gal. Div. N. W.		6			1	2	6	
Wis. Div. N. W.								
Wabash	9	416	2	116		169	28	
C. & E. I.		337		104		254	5	
C. M. & St. P.							1	
Wis. Central								
C. Gr. Western								
A. T. & S. Fe.	106	1	18			107	24	2
Through & Spec	176	1	8	180		92	27	
Total each grade	49	2,336	33	637	223	1,361	240	2
Total corn								4,481

RYE.

Railroad.	1	2	3	No Grade.
C. B. & Q.			20	
C. R. I. & P.			7	1
C. & A.			1	
Illinois Central			1	
Freeport Div.			12	1
Galena Div. N. W.			12	1
Wisconsin Div. N. W.			21	1
Wabash			1	
C. & E. I.			2	
C. M. & St. P.			23	1
Wisconsin Central			1	
C. Gr. Western			6	
A. T. & S. Fe.			1	1
Through & Special			4	
Total each grade			109	9
Total rye				118

BARLEY.

Railroad.	Bay Brewing.	Chevalier.	3	2	3	4	5	No Grade.	Total No. Cars all grain by Roads.
	3	3	2	3	4	5			
C. B. & Q.			34	11				2	1,036
C. R. I. & P.				18	3		1		448
C. & A.									995
Illinois Central									1,934
Freeport Div.				36	1				299
Galena Div. N. W.				10	1				329
Wis. Div. N. W.			128	133	8	7			407
Wabash									339
C. & E. I.									830
C. M. & St. P.			39	180	7	12	1		710
Wisconsin Central				3					12
C. Gr. Western			3	92	6				284
A. T. & S. Fe.									476
Through & Spec			2		1				1,024
Total each grade			206	483	27	20	3		9,723
Total barley								739	
Total grain, cars									9,723

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending March 9, as compared with same weeks last year, have been as follows:

	For the week ending Mar. 9.		For the week ending Mar. 10.		For the week ending Mar. 2.		For the week ending Mar. 3.	
	1895.	1894.	1895.	1894.	1895.	1894.	1895.	1894.
Wheat, bu.	736,000	1,111,000	1,213,000	590,000				
Corn	688,000	1,871,000	554,000	1,818,000				
Oats	12,000	5,000	7,000	3,000				
Rye								
Flour, bbls.	244,000	324,000	270,000	325,000				

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 19 months ending with February, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1894-95.	1893-94.	1894-95.	1893-94.
August	1,360,250	414,700	429,373	341,609
September	751,300	1,881,550	375,623	1,195,733
October	801,350	2,340,800	351,533	1,810,110
November	426,800	1,178,650	143,733	887,708
December	459,962	493,900	111,931	383,932
January	92,950	183,700	70,016	186,674
February	85,800	59,400	105,912	142,645
March		44,000		92,050
April		129,464		60,423
May		128,269		72,463
June		48,400		73,607
July		190,850		38,547
Total	3,978,412	7,093,683	1,588,421	5,285,498

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 36 weeks ending March 9, for the last three years, according to the *Cincinnati Price Current*, were as follows:

	1895.	1894.	1893.
St. Louis	8,476,000	11,322,000	23,932,000
Toledo	13,177,000	10,822,000	20,700,000
Detroit	3,506,000	7,297,000	7,044,000
Kansas City	5,919,000	13,348,000	23,494,000
Cincinnati	888,000	888,000	1,586,000
Winter	31,916,000	41,627,000	76,756,000
Chicago	21,784,000	19,161,000	51,332,000
Milwaukee	4,949,000	8,874,000	11,295,000
Minneapolis	41,448,000	59,568,000	50,932,000
Duluth	29,357,000	28,158,000	33,485,000
Spring	97,538,000	95,761,000	147,044,000
Total, 36 weeks	129,454,000	137,383,000	223,800,000

GERMANY AND RUSSIA AS GRAIN DEALERS.

Count Kanitz seems determined to press forward to a division his bill for the regulation of the German grain trade. The Count is a member of the famous Agrarian party, which has certain affinities with the small group of which Mr. Chaplin is the head in this country. His bill proposes nothing more nor less than that the whole trade in foreign grain should be made a state monopoly. Farmers would continue to bring their wheat to the local markets and sell it on their own account, but no foreign grain would be admitted into the land, except such as passed through the hands of the government. As wheat, for instance, is now one of the most depressed values in the world's markets, it is estimated that the German state could buy that cereal very cheap, and retail at a profit of 8s. to 10s. a quarter. The object of this would be twofold; in the first place it is reckoned that the monopoly with its attendant high prices would have the effect of raising the value of native wheat, and in the next place the several millions a year which the state would thus acquire might be applied to the reduction of taxation and other public purposes. But the scheme seems a very large order, and it is not surprising to learn that it is not supported by the government, in which case, of course, its chances of ever figuring on the statute book are remote.

When governments have assumed the responsibilities of traders they have not, as a rule, had brilliant success. The standard of public morality is higher in Germany than in any other country, with perhaps the exception of Great Britain, but to convert state officials into grain merchants would undoubtedly be exposing their virtue to a severe trial. Meanwhile Russia appears to be embarking, though on a comparatively small scale, in the grain trade. A Reuter's telegram of recent date states that, with a view to provide a remedy for the present stagnation on the Russian grain market, the government has resolved to become a large purchaser of cereals. The quantities of rye and wheat to be thus bought are to be determined from time to time by the state of the market—a delightfully vague phrase—and these supplies are to be purchased exclusively of the growers, which, so far, is a wise provision. The stock of cereals so formed is intended for the public granaries and the army commissariat department. The most remarkable passage comes at the end—namely, that "sales to private persons are to be effected in a gradual manner, and at such prices as not to depress the market." That is to say, when the department has got wheat or rye which has deteriorated in granary it must use its best endeavors to get rid of it at the hardest price. Past experience in Russia hardly justifies much reliance on the business tact of officials. Speaking of public granaries reminds me that two or three years ago, when a scheme of municipal granaries came before the St. Petersburg town council, one speaker remarked that the objection was a strong probability that rats would get at the grain. Thereupon, a gray-haired councilor convulsed the meeting by gravely observing that no doubt rats would come and fetch away the stores, but they would come on two legs.—*The Miller, London.*

ELEVATOR AND GRAIN NEWS

Send us news.

An elevator is being built at Valley, Neb.
A starch factory is to be built at Dawson, S. D.
A fiber mill will soon be established at Fargo, N. D.
A 25,000-bushel elevator is to be erected at Earlville, Ill.
An elevator will be built at Rileysburg, Ind., this spring.

There is a prospect of a grain elevator being built at Adair, Ill.

S. A. Hendee, grain dealer, is doing a good business at Adair, Ill.

Austin Augspurger has gone into the grain business at Bernt, Ind.

Edwin Frasen has started in the grain business at Everett, Wash.

R. Q. Pinckney will establish a starch factory at Charleston, S. C.

The Dublin, Texas, Oil Company has purchased 14,000 tons of seed.

An elevator will be built at Mechanicsburg, Ohio, and leased to buyers.

J. E. & H. J. Randolph will erect a cottonseed oil mill at Jefferson, Ga.

Meel & Gray have started in the grain business at Salt Lake City, Utah.

Arrangements are being completed for a farmers' elevator at Kenyon, Minn.

The Winona Mill Company's grain house at Volga, S. D., was closed March 1.

U. Poppen and B. Hayunga have charge of an elevator at German Valley, Ill.

Boulanger & Co., grain and hay dealers at Louiseville, Quebec, have dissolved.

Horn & Co. are handling a good deal of corn at their warehouse at Broadway, Ohio.

J. Martens will erect a warehouse and elevator at Kaukauna, Wis., in the spring.

Herbert Nicholson & Co., dealers in grain, hay, etc., at Helena, Mont., have assigned.

An elevator to be run in conjunction with a mill is to be erected at Reed City, Mich.

J. E. Tibbels & Co. have succeeded Christie & Co., grain dealers at Sioux City, Iowa.

Maher Bros., dealers in grain and implements at Gilmore City, Iowa, have sold out.

It is reported that two new elevators are to be erected at Hills, Minn., in the spring.

The Brand Dunwoody Milling Company is building a 20,000-bushel elevator at Joplin, Mo.

Flanagan & Maguire, dealers in grain, hay and fuel at San Francisco, Cal., have dissolved.

J. B. McCray & Son succeeded to the grain business of Hensleigh & Seeds at Mediopolis, Iowa.

I. T. Moore of Kirkville, N. Y., has put in a feed mill for grinding corn and cobs for feed.

The project for the erection of a cottonseed oil mill at New Orleans, La., has been abandoned.

Varney & Thayer, grain commission merchants at Lincoln, Neb., have dissolved partnership.

A project is on foot for the establishment of a large potato starch factory at Jamestown, N. D.

Work on the new elevator at Hayes, Ill., will be commenced as soon as the weather permits.

G. S. Murchie's elevator and grist mill at Calais, Me., which burned recently, is to be rebuilt.

T. E. Rinehart has succeeded to the grain and feed business of J. A. Kyle at Shenandoah, Iowa.

The Northern Grain Company of Ashland, Wis., paid taxes recently which amounted to \$700.

C. J. Weisenberger of Payne's Depot, Ky., will build a 50,000-bushel elevator at Midway, Ky.

B. Way has succeeded to the grain, flour and feed business of J. W. Vermilyea at Belleville, Ont.

E. F. Shelley, grain dealer at Cavallo, Ohio, has decided to move his elevator to Harrington, Ohio.

The indebtedness of the late state treasurer of Illinois, R. N. Ramsey, of which some surprising accounts have been made, began in 1883, when he lost

thousands of dollars in dealing in wheat and corn options on the St. Louis Board of Trade.

Wm. Kleoppel, grain buyer at Ida, Wis., is reported to be buying large quantities of wheat and oats.

Robert B. Levering, grain dealer at Mt. Gilead, Ohio, assigned recently with liabilities at \$20,000.

T. M. Euler has succeeded to the grain and hardware business of Euler & Payne at Bancroft, Minn.

H. E. Bassford, grain and hay dealer at Salt Lake City, has opened a branch store at Gold City, Utah.

The Beaman Elevator Company of Beaman, Iowa, have arranged to build an elevator early this spring.

The Farmers' Elevator Company has been organized at Mechanicsburg, Ohio, with a capital stock of \$1,000.

S. H. Baker and Foster Cahill have formed a partnership and gone into the grain business at Sullivan, Ill.

A starch factory that will handle not less than 1,000 bushels of grain a day is to be erected at Chadron, Neb.

The Wadsworth Milling Company has succeeded Leatherman & Yoder, grain dealers at Wadsworth, Ohio.

The Counselman Elevator Company will probably build another elevator at South Chicago, Ill., this season.

A company is being formed at Peoria, Ill., to erect two distilleries which will use 15,000 bushels of grain per day.

The Diamond Linseed Oil Company has been incorporated at Cleveland, Ohio, with a capital of \$100,000.

A. J. Helmer of Cissna Park has leased the Pruitt Elevator at Hickman, Ill., and will carry on a grain business.

Hunter & Co., old and well-known grain dealers at Mechanicsburg, Ohio, are said to be doing a good business.

W. H. Booth has succeeded to the grain and commission business of W. H. Booth & Co. at Kansas City, Mo.

Thomas Hollis & Co., dealers in grain, lumber, etc., at Radcliffe, Iowa, have sold their line of agricultural implements.

Farmers are talking of building a grain elevator at Emington, Ill., as they say they have at present no market there.

Wheat damaged at the recent burning of the elevator at Scottsville, N. Y., 10,000 bushels in all, has been sold for \$1,635.

T. S. Van Patten writes us that he has closed up his grain business at Afton, Iowa, and will look for a location elsewhere.

James Bell, grain dealer at David City, Neb., has sold out his hotel interests and will devote his time to the grain business.

The Crescent Cotton Oil Mill at Little Rock, Ark., which was recently destroyed by fire at a loss of \$50,000, will be rebuilt.

The Union Hay Company has changed its location in Kansas City, Mo., and now has private track and warehouse facilities.

The Chicago Grain Company of Chicago, Ill., has certified to a dissolution of organization and made a surrender of charter.

The Butts Lumber and Grain Company of Douglas and Augusta, Kan., has been dissolved, J. H. Butts continuing the business.

The elevators at Shabbona, Ill., have been receiving contributions for Nebraska drouth sufferers, and have already made a shipment.

A movement is on foot for the establishment of a flax mill at Grand Valley, Ont. The farmers agree to cultivate 300 acres of flax.

The firm of Meyer, Darby & Co., dealers in grain, hay, etc., at Jacksonville, Fla., has been dissolved, Claus Meyer withdrawing.

F. H. Peavey & Co. will soon begin the erection of an elevator at Portland, Ore., to take the place of the one burned some time ago.

The gross earnings of the Farmers' Elevator Association at McIntosh, Minn., last year amounted to \$1,400, \$600 above expenses.

The Farmers' Grain Company's elevator at Pleasant Mills, Ind., was raised recently. The farmers are fortunate in not having it razed.

Dillenbeck & Peck, dealers in hay, etc., at New York City, have dissolved partnership, L. S. Dillenbeck continuing the business.

We are informed that James M. Culver is doing a prosperous business with his new elevator at Culver, Ill. The elevator is situated on the Big Four road and is being worked night and day to keep up with

business. The house has been remodeled by Mr. Taylor and now handles three times the amount of grain of its former capacity.

Aaron Fox, manager of the farmers' elevator at Minneiska, Minn., reports business as rather slow, as there is little grain moving.

The Acme Milling Company intends to erect an elevator at Oklahoma City, O. T., to have a capacity of from 60,000 to 100,000 bushels.

Chester, Eaton & Co., dealers in grain, hay, etc., at Seattle, Wash., have opened another branch store and are doing a favorable business.

The Sioux City Starch Company's new plant at Sioux City, Iowa, is nearly completed and will commence operations about April 1.

An Iowa paper says that Charles Brockway keeps the grain market lively at Matlock, and that "he has no elevator, but loads into cars."

The Montana Mercantile Company has shipped from Kalispel, Mont., this winter over 8,000,000 pounds of oats and 500,000 pounds of wheat.

At McCallsburg, Iowa, J. P. Hesson has 18,000 bushels of corn cribbed. This is in a locality which was suffering from the drouth last fall.

The Northern Pacific Elevator at Wadena, Minn., has been closed and the superintendent, W. A. Briggs, has been transferred to Fargo, N. D.

F. H. Peavey & Co. own over 400 elevators in the United States and operate in almost all the grain states west of the Appalachian Mountains.

Ness & Moen, dealers in grain and produce at Peterson, Minn., have dissolved partnership, and will each carry on a business in the same lines.

The Claggett Bros. Elevator Company of Lexington, Ill., will build an addition to its elevator which will increase the capacity to 35,000 bushels.

The elevator at Dominion City, Man., has been purchased by the Lake of the Woods Milling Company and will be used by it for storing grain.

A. J. Morris, grain dealer at Davis, Ill., is running a feed mill in connection with his other business, and is reported to have built up a large trade.

D. M. Robbins of St. Paul, president of the Northwestern Elevator Company, has bought the Sioux City, Iowa, Elevated Railway for \$50,000.

Alois Ziliak is contemplating the erection of a complete steel elevator at Cynthiana, Ill., which will have a capacity of 55,000 bushels and cost \$12,000.

The Minneapolis and Northern Elevator Company's house at Bathgate, N. D., is unable to run on account of the artesian well which furnishes power giving out.

Mrs. C. B. Foster has had her elevator at Wood Lake, Minn., moved across the track from its former situation, and an extended business will be carried on.

The elevator at Ft. Dodge, Iowa, leased by Smith & Burr and used as a feed mill, which burned last month, is to be rebuilt as an elevator and roller mill.

Bartlett, Kuhn & Co. have a large elevator and warehouse at Tuscola, Ill., and deal extensively in corn. W. E. Murphy is in charge of their business at that point.

The Iowa State Railroad and Warehouse Commissioners recently went to Fayette, Iowa, on the C., M. & St. P. R. R., to decide upon location for an elevator at that station.

Robert Wilson has added a roller milling plant to his elevator at Henning, Ill., and will manufacture flour, buckwheat, cornmeal and maize, a substitute for corn starch.

Mr. Carruthers, a grain man representing Bartlett, Frazier & Co. at Emington, Ill., is said to be about to resign that position and carry on a business for himself at Emington.

E. C. Buchanan & Co., who carry on a grain and elevator business at Memphis, Tenn., write us that they expect to build a plant, though they have not yet decided on the time.

George Miller, proprietor of an elevator at Burkett, Ind., was recently sentenced to three years' penitentiary imprisonment for stealing 10,000 bushels of wheat from farmers.

Thomas Close and Ernest Eberts, rival grain dealers at Nabb, Ky., decided to fight it out the other day, and as a result Mr. Eberts has been arrested for breaking Mr. Close's collar bone and inflicting other injuries.

An elevator and grain warehouse is to be erected at Garfield, Wash., to be completed in time for the next harvest. There will be two buildings, each 30x100 feet in size, with steam elevator and feed mill in connection.

A bill is to be submitted to the state legislature of California authorizing the harbor commissioners to lease land belonging to the state on the water front of the city and county of San Francisco for the establishment of grain and other warehouses. The San

Francisco Produce Exchange has given the plan its indorsement. There is certainly room for improvement in the grain shipping facilities of the coast outlets.

The efforts which were being made to reduce the tax levy on the Belt Line, Terminal and Globe elevators at Superior, Wis., have proved in vain, as the city council rejected the plan.

Levering & Cover, grain dealers at Mt. Gilead and Edison, Ohio, have assigned to John A. Garver. The liabilities are estimated at about \$20,000, and are fully covered by available assets.

A Remsen, Iowa, correspondent of the *Alton Democrat* asks: "What is the matter with our grain buyers in Remsen? Strings of teams come through here daily with grain, bound for Oyens."

W. S. Sturgeon of Heyworth, Ill., writes us that he will build an elevator equipped with all the latest improved machinery early in the spring, for the accommodation of his growing grain business.

The rural council of Portage la Prairie, Man., is considering the feasibility of making a loan of \$20,000 to the Portage Farmers' Elevator Company, and it is expected that the money will be loaned.

It is reported that grain dealers at Fargo, N. D., are offering farmers more for their wheat for seed than they can get at the mills or at Duluth, and will take it from any point within 100 miles' radius.

A large glucose factory is to be erected at Chadron, Neb. Work will be commenced as soon as the weather permits, and when in operation the factory will use not less than 1,000 bushels of grain per day.

The Benton Hay, Grain and Flour Company has been incorporated at St. Louis, Mo., with a capital stock of \$10,000. J. H. Lippelmann, H. H. Hermann and Mira Lippelmann are the incorporators.

Suit has been brought against the Oregon Milling Company to recover the value of considerable wheat stored in its warehouse at Silverton, Ore., but which has disappeared through alleged crookedness.

The Chicago Elevator and Manufacturing Company has been incorporated at Chicago, Ill., with a capital stock of \$200,000. The incorporators are John T. Richards, Wm. A. Jennings and Wm. S. Harbert.

Clemons & Wilson, dealers in grain, etc., at Alida, Kan., have dissolved. R. F. Lehman, P. H. Gfeller and Geo. J. Wilson having succeeded to the business under the firm name of Gfeller, Wilson & Lehman.

L. E. Lackland of Tremont and C. E. Bates of Minonk, Ill., have purchased a two-fifths interest in the grain and coal business of Haynes & Kirkpatrick, who have elevators at Chenoa, Ocoya and Ballard, Ill.

The elevator run in connection with the Imperial Mill at Duluth, Minn., has been rearranged and improved to meet the capacity of the mill. Power for the elevator is transmitted by a wire rope over a mile in length.

The elevator at Buena Vista, Ill., is receiving considerable grain, but during the recent thaw farmers complained that the bad roads make hauling difficult. The question of good roads is an important one to all country elevator men.

It is reported that a couple of grain buyers at Minnedosa, Man., have been arrested on the charge of defrauding Winnipeg firms (the Ogilvie Company and N. Bawf among them) for whom they were buying, by issuing forged checks.

Henry Slingerman's storage warehouses at Coeymans, N. Y., which were destroyed by fire some time ago, will be rebuilt this spring. About 10,000 bales of hay, 4,000 bushels of rye and 2,000 bushels of oats were destroyed in the fire.

A. D. Henderson, a prominent Board of Trade man at Duluth, Minn., has been arrested on a charge of grand larceny in paying for several cars of hay with a worthless check. Mr. Henderson says his arrest is due to a misunderstanding.

The Stanford Grain Company has been incorporated at Stanford, Ill., with a capital stock of \$2,500, to operate an elevator. The incorporators are Christian Seibfritz, Henry Kauffman, Charles Tyner, Milton Bozarth and John Springer.

The Talpey Grain and Commission Company of Kansas City, Mo., has let the contract for the erection of its new elevator to take the place of the one burned some time ago. It is estimated to cost \$50,000. The contract is let to a Chicago firm.

F. Bohri & Son, successors to Bohri Bros., dealers in grain and general merchandise at Fountain City, Wis., write us that they intend to build a 10,000 to 15,000 bushel elevator. The company was established in 1862 and carries on an extensive and growing business.

The United Elevator Company of St. Louis, Mo., intends to make a new issue of bonds July 1 amounting to \$1,215,000. This will be done to mass the entire bonded indebtedness of the company into series. It has been said Hugh Rodgers, vice-president and chairman of the bond committee of the company, has been in correspondence with a London syndicate

of capitalists with a view of placing the entire issue there at a low rate of interest. B. L. Slack, secretary of the company, denies that any such effort has been made and says the bonds will be offered for sale in St. Louis.

It is reported that an eastern capitalist has been buying up shares in the Alpena, S. D., Warehouse and Elevator Company, a concern run by the farmers. Many stockholders are indignant, and the farmers are urged to hold on to their interests.

Martin & Trickle, who were doing business as grain buyers at Rantoul and Tomlinson, Ill., have assigned. The liabilities are estimated at about \$30,000, the assets unknown. It is said that Board of Trade speculation was one cause of the failure.

The firm of R. & J. Ervin, dealing in grain, seeds and broomcorn at Tuscola, Ill., is probably the oldest in that section of the country. The company owns a large elevator and warehouse, and ships broomcorn all over the United States and Canada.

The Cuyahoga Elevator Company has been incorporated at Cleveland, Ohio, with a capital stock of \$10,000. The incorporators are Harley Barnes, Geo. A. Bates, V. E. Wyman, C. J. Scott and W. T. Cowles. The company will deal in grain, flour, feed, etc.

It is said that there are large quantities of grain yet to be shipped from stations on the Wabash line in Illinois and Indiana. At some of the smaller stations as much as 40,000 bushels of corn are in bins and storehouses awaiting shipment, it having been held for better prices.

A bill has been introduced in the Minnesota Legislature authorizing the railway commission to sell the elevator site at Duluth, which was bought two years ago with the idea of the state going into the elevator business. This is the natural end of all such paternalistic schemes.

People at Grantsburg, Wis., are making strong efforts to have a Chicago firm erect a hay baling establishment. There are 30,000 acres of available hay land in that vicinity, and it is claimed that a more suitable location for such a plant could not be found in the Northwest.

Parrish & Kratz of Amboy, Ill., write us that they sold their elevator to Geo. H. Edson of Belle Plaine, Iowa, whose elevator burned February 15. Mr. Edson will run the business as usual without making any changes. Parrish & Kratz are now looking for a good location for an elevator.

The Farmers' Elevator Company of Cottonwood, Minn., which started in business a year ago under an indebtedness of \$2,500, recently held its first annual meeting, at which directors were elected. The company was declared to be in a prosperous condition, clear from indebtedness.

Wm. M. Luce of Cumberland, representative of R. D. Johnson & Co., who lost a considerable quantity of wheat in the recent elevator fire at Hancock, Md., recently announced that the damaged grain could be had for the carrying away, which was no sooner said than the people carried it away.

The Washburn-Crosby Company of Minneapolis recently purchased two more No. 3 Angle Sieve Fanning Mills of the Lanark Manufacturing Company of Lanark, Ill. This makes nine large Angle Sieve Mills the company has put in, which is certainly a tribute to the efficient working of those machines.

The *Enterprise* of Findlay, Ill., says: "Our grain buyers seem to have instituted a miniature Board of Trade, the difference between ours and the real thing being that ours lacks the usual bear. Both our animals wear horns and are tossing prices skyward in a most daring manner. Now is time to sell your grain."

Articles of incorporation have been filed by the Lake Superior Elevator and Storage Company, whose purpose it is to construct, purchase, lease or otherwise acquire grain elevators. The capital stock is placed at \$10,000 divided into 100 shares. The incorporators are James Bardon, C. L. Catlin and Henry S. Butler.

A large steam elevator, equipped with cleaning machinery, will be built at Garfield, Ore., this spring. The main building, or elevator proper, will be 30x100 feet, with an addition of a warehouse room of about the same size, and will contain a first-class chop mill, where grain can be chopped without any extra handling charges.

It is expected that the new grain elevator at Prescott, Ont., which is to have a capacity of 500,000 bushels, will be ready for receiving grain by the first of June. One of the advantages likely to accrue from the erection of this elevator is a rapid discharge on the arrival of vessels, as it will have two marine legs capable of lifting 20,000 bushels per hour.

The suit of W. R. Mumford & Co. of Chicago vs. J. M. O'Shea, Missouri state grain inspector, has been settled in favor of the defendant. The Richland Grain Company at Kansas City in January and February, 1894, arranged with Mumford & Co. to ship their wheat, and on receipting a bill of lading and certificates of inspection of eight cars of wheat, Mumford & Co. sent it \$2,030. The wheat never

reached Chicago, and Mumford & Co. brought suit against Grain Inspector O'Shea and his bondsmen on the claim that his subordinates at Kansas City issued a certificate on wheat that did not exist, and he is responsible for their act. The defendant claimed that the certificate was not issued by the grain inspector, but was a forgery.

An elevator man at Duluth, Minn., has estimated that 100,000 bushels of oats have been received at that market this season from Washington. Naturally, it would seem as if railway freights would eat up the market value, but it is said that the oats have been sold at Duluth to net a better figure to the shipper than he could secure at home. The freight charge per bushel amounts to about 16 cents.

The "Board of Trade," operated by William J. Connors & Co., who claimed to represent the firm of Lamson & Co. of Chicago, and who have been doing business in Bloomington, Ill., nearly a year, failed to open up for business March 11, and it is said that small speculators are out \$15,000 to \$20,000. W. J. Connors is said to have conducted bucket shops in Detroit, Denver, Anderson, Ind., and elsewhere.

The Hudson Bay Company has made many improvements to its plant at Prince Albert, Saskatchewan. An elevator has been erected with a capacity of 10,000 bushels with two elevator legs capable of handling 1,000 bushels per hour. It has one Monitor Dust Cleaner of 600 bushels' capacity, and one Gurney's Latest Improved Hopper Scale of 60 bushels' capacity. The company has now a storage capacity at this point of 35,000 bushels.

Linebarger & Snyder, grain dealers at Stanford, Ill., have sold their three elevators to F. M. Snyder of Bloomington. A. P. Snyder has obtained possession of F. M. Snyder elevator at Hopedale, where he will carry on business. Mr. Henry Linebarger has been in the grain business for 25 years. This change has had no effect upon the farmers' movement in the vicinity of Stanford. The farmers have become dissatisfied with the market which Linebarger & Snyder offered them, and have taken steps to build and operate their own elevator. They purchased the lumber and raised the funds, and have incorporated their company.

Ex-State Senator Austin of Seattle, Wash., who is an extensive grain buyer, said recently: "Spokane needs an elevator, a good big one, and needs it badly. Why, I would rather have a wheat business in Spokane to-day, buying wheat from points within the radius covered by the milling-in transit rate, with a big elevator and a good company and the millers working in harmony with me, than anywhere in the world. We could swallow up all the wheat in this country, pay the farmers for it, store it in the elevator, and let the mills take it in ratio to their capacities. The man or the company who will do that will have a future."

Last year the Northwestern Elevator Company had to pay taxes on 13,000 bushels of grain which was in its warehouse at Hazel, S. D. On account of the railroad strike it was impossible to ship the grain, and the elevator company appealed from the decision of the county commissioners on the plea that the grain had been sold. The Circuit Court has sustained the county commissioners. It is suggested that from the fact that property is assessed in Minnesota April 1, and in South Dakota May 1, an excellent opportunity is given to elevator companies to ship their grain into Minnesota just before May 1, and thus evade paying taxes in either state.

The Lake Carriers' Association at Buffalo, N. Y., recently signed a contract with James Kennedy, under the terms of which the latter will handle all the grain brought into the port of Buffalo this season. The boss scooper system will be done away with, the handling of the grain being placed in the hands of one man. Under the arrangement every class of grain will be rated the same for unloading charges—\$3 per 1,000 bushels. Last season the rate was from \$3.50 to \$4. Mr. Kennedy also signed a contract with the elevator owners to trim grain on canal boats for 75 cents per 1,000 bushels. Last season's rate was \$1.25. The scoopers or grain shovelers protest against the arrangement, claiming that it will mean a reduction in wages to them.

There is a suspicion among Kansas City grain men that they are being worked again on a scheme similar to J. D. Richland's tricks. Last November a supposed farmer named D. J. Conland wrote the Schroeder Commission Company that he had shipped them two cars of corn and that they might hold the money and he would call for it. The corn reached Kansas City over the Santa Fe road, without a bill of lading, and was delivered. It is alleged that Conland sent the bill of lading with draft attached to the Hayward Commission Company. The draft was honored and money forwarded. Of course no corn arrived for the Hayward company and Conland was evidently scared away from collecting from the Schroeder company. This is the cause of a suit recently brought against the Schroeder Commission Company by the Santa Fe Railroad Company to recover the value of the corn. It is said that many other grain men have suffered by the same trick.

CROP : CONDITIONS.

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

SOUTH DAKOTA, UNION Co.—Seeding is finished and prospects are good.

TEXAS, GLEN ROSE, SOMERVELL Co.—The wheat crop is a failure. The prospective corn and oats crops will be 10 per cent. greater and the cotton acreage less.

SOUTH DAKOTA, MILLBANK, GRANT Co.—Seed grain and seed are very scarce this spring, and if farmers do not get help to procure grain at least half the land will remain unsown.

ALABAMA, MONTEREY, BUTLER Co.—Fall oats have been killed by recent frosts in portions of the state, but many farmers have plenty of seed and are sowing again on an increased acreage.

WISCONSIN, DALE, March 4.—Winter wheat that looked as though it would yield 2,000 bushels to the acre, has faded and gone. The farmers are getting ready to replace it with spring wheat.

ILLINOIS, KINDERHOOK, PIKE Co., March 4.—The wheat is coming out from under the snow looking fine, and the prospect for a big harvest of that cereal was never better at this season of the year.

NEBRASKA, FAIRFIELD, CLAY Co., March 5.—Fall wheat is looking splendid here this spring. We have had some rain, which has put the wheat in good shape. Farmers are busy plowing. J. S. HAMILTON.

INDIAN TERRITORY, VINITA, CHEROKEE NATION, March 3.—The cold weather has damaged the crops to some extent; how badly damaged we cannot tell until the weather gets warmer. J. S. OBORN.

ALABAMA, DALLAS Co.—The oat crop has been entirely killed on thousands of acres, partially killed on many more and badly injured under the most favorable circumstances. Farmers are sowing more grain.

CORN IN KANSAS.—It is said that within a radius of three miles around Menoken, Shawnee Co., Kan., there are 50,000 bushels of corn of the crop of 1893-94 held by farmers. Farmers are generally holding back for better prices.

TENNESSEE, GLENLOCK, MONROE Co., March 4.—We have had a regular northern winter here. It is all gone now, and farmers are plowing for corn. Wheat looks very well, as the snow preserved it nicely. THOMAS JONES

INDIANA, ARGOS, MARSHALL Co., March 11.—The growing crop looks splendid—much better than a year ago. About one-eighth of the last crop remains in store and in farmers' hands. The acreage is about the same as last year. J. C. GORDON.

KANSAS, ALIDA, GEARY Co., March 11.—The acreage of wheat here is about as usual, and there is not much winter-killed up to date. The amount in store and in farmers' hands is almost sufficient for home or local demand. There is none to go on the market. GFELLER, WILSON & LEHMAN.

INDIANA, BRINGHURST, CARROLL Co., March 11.—The acreage of wheat is about an average. The condition of the growing crops has been good, but a recent hard freeze may have done some damage. There is an average quantity of grain in farmers' hands and in store. A. B. COHEE & CO.

SOUTH DAKOTA, DEADWOOD, March 4.—The farmers in the Rapid and Box Elder valleys are putting in their wheat and seeding is going on quite generally along some of the valleys. Reports are that the ground is in fine condition for the seed, only needing moisture and warmth to bring it forth. —*Deadwood Times*.

MICHIGAN, BRADLEY, ALLEGAN Co., March 12.—The acreage of wheat in this locality is about 80 per cent. of the average. The condition of the growing wheat is 90 per cent., the condition of rye 95 per cent. The stocks in farmers' hands are, wheat 15, rye 10, oats 50, corn 60 per cent. BRADLEY ELEVATOR COMPANY.

WHEAT IN NORTH DAKOTA.—The North Dakota Milling Association has been bidding Duluth price for cash wheat in all the country markets, less the local freight charge to the nearest mill. No mill in that state has been able to obtain from farmers, even at that premium, what wheat it needed to operate on.

IOWA, ALTOONA, POLK Co., March 9.—There is no winter wheat sown here to my knowledge. It is too early yet for spring sowing of wheat and oats. All oats and corn in this vicinity will be needed for home consumption. There is no wheat here and nothing to ship out until another crop is harvested. T. E. HAINES.

MISSOURI, ARROW ROCK, SALINE Co., March 12.—The acreage in wheat is about 25 per cent. less than last year. The condition of the growing crop is 10 to 15 per cent. worse than last year, which was caused by cold, damp weather. There is very little grain in farmers' hands, and what there is will be used for

home consumption in the shape of bread and feed for stock. Unless there is considerable improvement in prices most of the growing crop will be fed to hogs. C. M. SUTHERLIN.

TEXAS, SAN ANTONIO, BEXAR Co., March 1.—It has been raining here every day the past week. It looks as if Texas was going to have a good year, as drouth is a great trouble in this part of the country. Very little wheat is raised in this country, most of the mills grinding wheat from Indian Territory. AUG. GATHMANN.

OHIO, ALPHA, GREENE Co., March 11.—The growing wheat crop is looking fair; I don't think the cold weather damaged it any. The acreage is about 90 per cent. of an average crop. The amount in farmers' hands is about 10 per cent. About all the farmers I have talked to claim the young clover is badly damaged. J. H. HARBINE.

MINNESOTA, ALBERT LEA, March 7.—Perhaps Freeborn county can take the first premium for early seeding this year, for considerable was done last week. The prospect now is that the acreage sown to wheat will be greatly decreased from previous years, the extremely low price having discouraged many from engaging in its production.

IOWA, AFTON, UNION Co., March 11.—The acreage of winter wheat and rye is probably 15 per cent. greater than last year. It is looking well, but will need rain soon. Grain raised last year has all been fed to stock, and dealers have been shipping in for the last two months, which will have to be done, until another crop is raised. T. S. VAN PATTEN.

CALIFORNIA, SANTA ANA, March 4.—The San Joaquin ranch presents a most beautiful sight just now with its 40,000 acres of growing barley in the finest condition, and the promise of the largest crop ever raised in this county. The barley never looked better than now, and the ranchers are feeling jubilant over the prospects. —*Los Angeles Express*.

OHIO, ANDERSON, ROSS Co., March 12.—The wheat acreage sown last fall is about 90 per cent. of an average. The condition of the crop is at present good, but the worst weather is yet to come. There is no other crop growing at this time. Perhaps 10 per cent. of last year's wheat crop is in farmers' hands and about 20 per cent. of the corn crop. ANDERSON & BRO.

MICHIGAN, BRIGHTON, LIVINGSTON Co., March 11.—The acreage of wheat and rye together is about the same as last year, the acreage of wheat being about 10 per cent. less and that of rye 10 per cent. more. I think there is at least 50 per cent. less in farmers' hands and in store than a year ago, and that in this vicinity 75 per cent. of the crop has been sold and fed out. F. T. HYNÉ.

TEXAS, DALLAS, February 21.—North Texas is putting in the biggest crop of oats ever known in the history of the state. The January and February snows and ice left the ground in a pulverized condition, and since the sun has come out thousands of plows have been put to work preparing the land for oats. On account of the long dry spell in the fall and early winter, the wheat crop suffered.

INDIANA, BROWNSVILLE, FRANKLIN Co., March 11.—We have about the usual average sown this season. Wheat looks well, and there is not much damage done yet. The reserve grain in farmers' hands is the smallest in years, not more than one-tenth of last year's crops. There is no wheat in store that I know of and I think millers will have to ship in wheat before the new crop is harvested. D. V. SPRIVEY.

KANSAS, BARNES, WASHINGTON Co., March 11.—The acreage of the crops here is about 75 per cent. of an average. The growing wheat has been frozen to the ground, but the roots seem to be alive. We have had plenty of rain and little of snow all winter. Stocks are pretty light, a great deal having been used for feed. There is over one-tenth of the crop in farmers' hands, and about 3,000 bushels in store. M. SOLT.

KENTUCKY, JETT, FRANKLIN Co., March 12.—Our crops average about 75 per cent. The condition of the growing crop is about 90 per cent. of what it was this time last year. About 3,000 bushels will cover the wheat held by farmers in the territory tributary to this place, and most of this is sold for early delivery. This amount represents about 5 per cent. of what is usually delivered here. There is none in store. JAS. R. SHAW.

IOWA, ANTHON, WOODBURY Co., March 12.—This is a spring wheat district, consequently there are no crops sowed yet. There will be an average crop planted and sowed this year. There is no grain in store and very little in farmers' hands. We will have to depend upon getting grain shipped in to supply feed. In 1893 we shipped from this station 625 carloads of grain; this year we will have to ship in about 30 carloads for feed. F. M. COONEY.

WASHINGTON, PALOUSE.—The unprofitable price of wheat and the far from pleasing prospect for better remuneration to the producer of this staple will certainly have the effect of largely curtailing the acreage of this cereal in this vicinity this season. The owners of many fields are preparing to summer fallow large tracts which have in many instances stood badly

in need of a rest for years, but which a fair price for wheat has kept in a constant state of cultivation. While many propose to summer fallow, others will plant largely to barley, oats, potatoes, hay and even some corn as an experiment. —*Palouse News*.

INDIANA, BROWNSBURG, HENDRICKS Co., March 13.—I have taken an extensive survey of my territory the last two months and have concluded that the wheat acreage is 20 per cent. less than last year. Condition is a full average. Stock in farmers' hands not over 10 per cent. of the amount on hand this time last year. S. M. MCCASLIN

OHIO, ARCHBOLD, FULTON Co., March 11.—The acreage of wheat sown in this district last fall is 5 to 10 per cent. larger than the previous year. The condition of the growing crop was excellent up to 10 days ago, but suffered greatly the past few days through constant freezing and thawing. The stock in farmers' hands is very light, probably 10 per cent. of last year's crop; still a great deal of wheat is fed to stock. HENRY HIRSCH, of the Archbold Milling Company.

COLORADO, COLORADO SPRINGS, EL PASO Co., March 12.—There is not a large amount of grain raised in this section. The crop is principally oats. Last year's crop, which was more than an average, has been mostly marketed and consumed. As far as is known the average will be about the same as last year. We are receivers of grain instead of shippers, and as a rule obtain our supplies in Nebraska and Kansas, but this year we are shipping in from Iowa and Missouri also. J. F. SELDOMRIDGE & SONS.

KANSAS, WELLINGTON, March 11.—It is developing here that considerable of our wheat is killed. More acres have now been given up and arrangements made to put them in other crops than many good Kansas counties have in wheat. Sumner county will raise lots of wheat with favorable conditions, but fully one-half of the soft wheat in this vicinity is now dead. Hard wheat is much better, though some fields have been sown to oats. Our county has an acreage of probably 200,000 acres of hard wheat and 50,000 acres of soft wheat.

INDIANA, BOSWELL, BENTON Co., March 12.—The movement of corn from this section this winter has been very free, and we do not think there is 25 per cent. of the crop still in farmers' hands; of oats there is probably 15 per cent. There is very little of either grain in store at stations along the Lake Erie & Western near here; in fact, it would be nearer right to say there was none. There is not much wheat raised in this territory, but there is less sown this season than last. Most of last year's crop has been fed to stock. KING & SMITH.

MICHIGAN, BERRIEN CENTER, BERRIEN Co., March 11.—The acreage of wheat sown last fall is about the average of former years. The growing crop is probably a few points below the average, but there will be a fair crop if there is not too much freezing and thawing. About 50 per cent. of the last crop is in farmers' hands. Farmers have fed some wheat to stock the past winter, but not over 10 per cent. of the crop, so that the farmers have fully 50 per cent. of the last year's crop in their granaries besides some wheat two years old. W. J. CHARPIE, by S. Z. W.

TENNESSEE, CLARKSVILLE, MONTGOMERY Co., March 11.—It is yet early to report on crops in this section. About half the usual crop of oats has been sown, but with favorable weather during the next two weeks a full average crop will have been put out. The usual number of tobacco beds are being burned and preparations made for a full crop. Last year's corn crop was good; most of it remains in farmers' hands, as prices have been below what they want. There is very little wheat in farmers' hands. The acreage is about the same as last year, and we have heard no complaints of damage on account of the severe winter, as snow was on the ground most of the time. F. P. GRACEY & BRO.

GOVERNMENT REPORT OF STOCKS IN FARMERS' HANDS.—The crop report of the Department of Agriculture for the month of March consists principally of estimates of the distribution of corn and wheat, the stocks remaining in the hands of farmers, and the proportions of merchantable and unmerchantable. The report is based on country estimates of the percentage of last year's product remaining in first hands. Obvious errors and inconsistencies of statement being corrected and differences harmonized, all grain in the hands of farmers, including amounts remaining over from previous years, are embraced in the estimates given. The corn on hand as estimated aggregates 475,564,450 bushels or 39.2 per cent. of the last crop. This proportion has been exceeded but four times in the last ten years. The quantity, however is an unprecedentedly small one. The consumption of corn for eight months is an unusually small one, which fact is explained by the large amounts of wheat fed to stock. The aggregate sold from farms to go beyond country boundaries is 163,934,640, or 13.4 per cent. of the crop. The proportion merchantable is 999,400,600 bushels, or 83.4 per cent. The values returned for merchantable corn average 44.8 cents; for unmerchantable 28.6 cents, making an aggregate value of \$508,711,129, which is \$46,000,000 less than the December valuation of the crop, and

averages 41.9 cents per bushel. The estimated amount of wheat in farmers' hands is 75,000,000 bushels, or 16.3 per cent. of the last crop, and 39,000,000 bushels less than last March. The explanation for this enlarged measure is to be found in the fact that large quantities have been fed to hogs and other stock. Returns from North and South Dakota, Nebraska and Kansas indicate unprecedented exhaustion of last year's crops, correspondents in many counties reporting not enough on hand for spring seed and necessary food supply. The stocks of wheat in farmers' hands, as compared with former years, with the ruling prices in former years at this date, are given as follows:

Year.	Bushels.	Per Cent.	Cash Price.
1895.....	75,000,000	16.3	52½ c.
1894.....	114,000,000	23.8	58½ c.
1893.....	135,000,000	26.2	72½ c.
1892.....	171,000,000	28.0	87½ c.
1891.....	112,000,000	28.0	94 c.
1890.....	156,000,000	31.9	77½ c.

The stocks of corn are reported as follows:

Year.	Bushels.	Per Cent.	Cash Price.
1895.....	476,000,000	39.3	44½ c.
1894.....	589,000,000	36.4	34½ c.
1893.....	627,000,000	38.5	40 c.
1892.....	860,000,000	41.8	41½ c.
1891.....	542,000,000	36.4	54 c.
1890.....	970,000,000	45.9	28½ c.

MICHIGAN.—In the crop report for March, issued by the secretary of state March 8, the startling statement is made that the wheat crop of the state for the year 1894 is exhausted, and that the people are now subsisting on the production of previous years. The figures given are: Wheat crop of 1894, estimated in October, 1894, 21,627,649 bushels; used to seed 1,108,000 acres, 1,662,000 bushels; bread for farmers for one year, 6,627,000 bushels; sales reported to March 1, 1895, 8,006,618 bushels; fed to stock (22 per cent. of the crop, as estimated by correspondents) 4,758,000 bushels; total, 21,053,618 bushels; wheat unsold, 574,013 bushels. The report says that in the above calculation only sales actually reported are included. The sales in February and previous months not yet reported will wipe out the remainder shown. The marketings by farmers, as returned to the secretary's office and published in his reports from month to month, seem to confirm this conclusion. They are less each month than in the corresponding month of the preceding year. The quantity of wheat reported marketed from all points in the state in the seven months from August to February is 2,278,421 bushels less than reported marketed in the same months last year, but as no reports for February of this year have yet been received from a large number of stations, the actual decrease is less than this total. The amount marketed at 273 points in the state from which reports were received monthly from August to February each year was 617,337 bushels less in the six months from August 1, 1894, to February 1, 1895, than in the six months ending with February 1, 1894. Temperature and precipitation in February were both below the normal in all sections of the state; snow, however, covered the ground fairly well until near the close of the month, affording good protection to wheat. In the southern counties the snow was all gone at the end of the month, but in the central and northern counties the covering was ample.

OBITUARY

Geo. A. Tremblay of the grain and hay firm of G. Tremblay & Son, Montreal, died recently.

J. R. Ervin, who had been engaged in the grain business at Dubois, Neb., for some time, died recently.

Leonidas Chapin, formerly grain and lumber dealer at Mattoon, Ill., and long identified with the mercantile interests of the state, died at Belleville, Ont., February 16.

John Wakeman, a prominent member of the New York Produce Exchange, died recently, in his 64th year. Resolutions were adopted on 'Change in recognition of his honorable career in business.

Arthur C. Plinkham of Evanston, Ill., died February 22, in Indianapolis, from pneumonia. Mr. Plinkham was born at Clinton Locks, Conn., and at the age of 20 years went to Boston, where he was engaged in the grain business. He went to Evanston in 1887, and continued in the commission business in Chicago. A widow and two children survive him.

Frederick C. Chapin died at Toledo, Ohio, February 25, at the age of 65 years. Mr. Chapin was born in the state of Vermont and emigrated to Indiana in 1837. He went to Toledo in 1865 and embarked in the grain trade at that place in 1873. He was a well-known and honored member of the Produce Exchange, which passed resolutions in tribute of respect and sympathy with his family.

PRESS COMMENT.

RATES SHOULD BE REDUCED.

In glancing at the map of the world one finds that the wheat fields are farther from the coast in this country than in any other. The sea route to Liverpool is less than most of the other countries. So it is quite evident that if this country intends to ship much abroad, rates of transportation to the coast should be reduced to a minimum.—*Market Record*.

DESIRED BY POLITICIANS.

Politicians are urging the grain inspector bill to gain positions and salaries, which farmers will pay, as we believe, without corresponding benefits. States that have tried an inspection commission have not found it a success, and small dealers who favor it will find that competition among plenty of exporters and millers is what they most need.—*Trade Register, Seattle, Wash.*

MUST IMPROVE CANALS.

It will be necessary for New York to enlarge and improve its canals or they will go gradually out of use. Notwithstanding the enormous crops of 1893, the shipments on the Erie Canal for 1894 were half a million tons less than the previous year, and the smallest since 1859. This loss of business cannot be attributed entirely to stagnation in trade, as the depression has been equally great during previous panics of the last thirty-five or forty years.—*Chicago Herald*.

CORN VS. WHEAT.

We understand that some of the townships are talking of bonding for the purpose of buying seed wheat. It is the opinion of the *Leader* that such a move is a wrong one altogether. We have been bonding and spending good money in this county year after year, and what do we get? Nothing. It is our opinion that if bonding must be done for seed, make it corn instead of wheat. The investment per acre for seed corn is a great deal less than for wheat, while the chances for profit are as great if not greater in favor of corn.—*Leader, Frederick, S. D.*

THE PATTERSON BILL.

Should the history of the so-called pooling bill which failed to pass the Senate during the last session ever be written, it will be found that three principal causes contributed to that result. By that part of the intelligent community best fitted to judge in the case, the bill was almost universally approved. Those who had axes to grind, political ends to serve, or strong prejudices to overcome, were opposed to its passage; but the majority in its favor, both among the members of the Senate and their constituents at home, was so large as to almost preclude the idea that it would fail of being put upon its passage some time during the session.—*Railway Review*.

TAX ON OPTIONS AND FUTURES.

Among the peculiar bills brought forward at the present session of the New York legislature is one which levies a tax on dealings in options or futures in grain or provisions. The bill requires the treasurers of exchanges to furnish the state comptroller with statistics of such transactions, and in the event of their failure to do so authorizes the comptroller to make examinations himself for the purpose of fixing the amount of the tax to be levied. Of the absurdity of subjecting transactions of this kind to a special tax it should not be necessary to speak in any commercial community. A prohibition of this kind widely applied would come pretty close to the abolition of commerce in any but the most limited range of transactions. It is hardly likely that this legislation will be enacted; at the same time it is well to call attention to the fact that it is proposed, so that its true character can be exposed in the legislature itself.—*Broadstreet's*.

FROM THE LAKES TO THE SEA.

The Dominion of Canada has already spent over \$60,000,000 in canals, and is still engaged in improvements likely to court traffic via the St. Lawrence as against the Hudson, and this is likely to be felt two years hence, when the weakest link in the chain, viz., the Soulanges Canal, on the St. Lawrence system, is deepened from 9 to 14 feet. Besides this, in 1897 the port of Montreal will be in a position to record a 30 feet depth of water, and from that point a clear 14 feet through the shoalest places to the head of lake navigation. This draft, however, will not permit of carrying ocean cargoes without transshipment, any more than the 9 feet draft of water in the Erie Canal would, but it does point out a cheaper route of transportation owing to the larger class of vessels which the deeper St. Lawrence canals will be able to accommodate, and a slight saving in distance traversed, as Montreal is

nearer Duluth, and also Liverpool than New York is, all of which goes to show that adequate and prompt measures need to be entered into to hold the balance of traffic on the American side and via the Erie Canal.—*Marine Record*.

SEED WHEAT.

Over \$9,000 worth of seed grain has been loaned to farmers of Lincoln county, S. D.

Valley county, Neb., has accepted the Chicago Board of Trade's offer to supply seed grain.

Douglas county, S. D., has advertised for 15,000 bushels of seed oats and 20,000 bushels of seed wheat.

Beadle county, S. D., commissioners have purchased 30,000 bushels of seed wheat for distribution, and about 20,000 more will be needed.

A committee has recommended that the Nebraska Legislature appropriate \$20,000 to purchase seed grain. It is expected that the measure will be adopted.

The Holt county, Neb., relief committee says that any agents traveling over Illinois or other states soliciting aid for farmers of that county are frauds, and that the committee will be able to take care of all cases of need.

It has been estimated that the five states of Indiana, Illinois, Missouri, Iowa and Minnesota will contribute not less than 500 cars of seed grain to Nebraska. Every county in Illinois and Missouri will donate a car each.

The proposition to bond Holt county for \$50,000 to purchase seed grain and feed was voted upon at a recent special election and defeated, the vote standing 6 to 1. A majority of the farmers are without seed and the offer of the Chicago Board of Trade will probably be accepted by many if no other is made.

Two hundred Yankton county, S. D., farmers recently applied to the county commissioners for wheat, oats and barley seed for spring planting. It is estimated that one-third of the farmers of the county need seed, about 15,000 bushels being required. The crop was good in the county last year, but the farmers used small grain for feed.

The Chicago Board of Trade relief committees are working hard to secure seed for Nebraska farmers. It is estimated that 1,500,000 bushels of grain will be needed. The transportation of seed grain to the drouth stricken districts is one of the difficult problems the committees have to face. The Rock Island Railroad offers free transportation and will devote \$30,000 to the relief work.

The Chicago Board of Trade has formulated a plan for relieving the drouth sufferers in the trans-Missouri region. The plan provides that a fund shall be raised by popular subscription, and grain for seed purposes purchased and sold to the destitute farmers, who will be required to give mortgages on the crops that may be produced from the grain. The notes secured by the mortgages are to be paid in the event of a sufficient crop. The distribution or sale of the grain will be made by the leading bankers and merchants in the drouth districts.

The Kansas Board of Railroad Commissioners have made the following awards of contracts for supplying seed grain: Moore Elevator Company, Kansas City, 5,000 bushels of barley, 2,500 bushels of potatoes, 12,000 bushels of oats. Hanson Gregg Grain Company, Kansas City, 7,000 bushels of barley; J. S. Perkins, Turner, Kan., 5,000 bushels of potatoes. E. Annabel & Co., McPherson, Kan., 2,400 bushels of potatoes, 1,000 bushels of white Kafir corn, 500 bushels of red Kafir corn. H. J. Deffenbough, Washington, Kan., 4,000 bushels of oats. Bids on wheat were not asked for.

The commissioners of 27 counties in Kansas have made requisitions on the state board of railroad commissioners for their respective shares of the seed appropriation as follows: Kiowa, \$1,177; Pawnee, \$2,202; Phillips, \$5,593; Norton, \$4,156; Graham, \$1,740; Rooks, \$3,073; Russell, \$3,103; Rush, \$2,204; Logan, \$1,114; Hodgeman, \$930; Decatur, \$3,321; Sherman, \$2,514; Pratt, \$3,214; Ellis, \$3,217; Greeley, \$565; Kearney, \$520; Ellsworth, \$2,000; Wichita, \$718; Wallace, \$1,063; Stevens, \$341; Sheridan, \$1,387; Rawlins, \$2,661; Osborn, \$4,792; Gove, \$1,013; Cheyenne, \$2,159; Barton, \$5,756; Scott, \$498; total, \$61,031. Ten counties have declined to ask for their shares, as follows: Barber, \$2,454; Comanche, \$736; Hamilton, \$743; Seward, \$354; Meade, \$867; Clark, \$738; Finney, \$1,521; Lane, \$767; Gray, \$643; Stanton, \$330; total, \$9,153. Counties which have not been heard from are as follows: Edwards, \$1,421; Grant, \$330; Lincoln, \$3,978; Morton, \$196; Smith, \$6,153; Thomas, \$1,890; Ford, \$2,181; Haskell, \$356; Morris, \$4,665; Ness, \$1,926; Stafford, \$3,718; Trego, \$1,062; total, \$27,670.

It is said that at no previous time have the wheat receipts at Superior, Wis., been so great in the month of February as this year. This is explained by the fact that in former years wheat in store in North Dakota was not assessable until April 1, but has been changed to March 1.

CHattel MORTGAGES ON GRAIN IN MANITOBA—STANDARDS.

The council of the Winnipeg Grain Exchange in its report to the members said: The matter of chattel mortgages on grain in farmers' hands has presented to grain dealers in this country some very vexatious features. The utter impossibility of a buyer at a country elevator being able to detect any difference between grain under chattel mortgage or free, when presented in sacks for sale at an elevator door, or to attempt to identify the original ownership of such, is readily apparent. If possible, the Chattel Mortgage Act should provide protection to the purchasers of grain in an open market, otherwise the whole trading of grain in this province is made complicated and unsafe. The Exchange considered the matter with their solicitor and representatives of agricultural implement firms, and a tentative understanding was arrived at.

President S. A. McGaw of the Exchange also touched on the subject in his annual address by saying: The matter of chattel mortgages on farmers' crops is another matter to which the Exchange devoted considerable attention, and certainly it appears to me that we should have some legislation to make the buying of grain from farmers on an open market less hazardous than it is at present.

President McGaw also spoke of the present unfair method of establishing standard grades as follows: With reference to the grain standards, I am certainly of opinion that people who live in the country and grow, handle and mill the crop are the ones who are entitled to and the best fitted for the fixing of the standards. Perhaps my views are a little extreme in this matter, but I think by a proper representation to the department at Ottawa, the inspection act might be amended so that the standard made for Manitoba would be more in conformity with the character of wheat grown. I believe in a uniform standard, and when one is arrived at, which will give as far as possible general satisfaction, allow that standard to remain. This is following the American principle, which I believe to be a good one, as any foreign importer knows what to expect, and does not look for a change of standard from year to year.

TO STOP BUCKET SHOP DEALS.

Representative Kent has introduced a bill in the Illinois Legislature "to prevent gambling in grain, beef, pork, lard or provisions by corporations, brokers or others." It provides:

It shall be unlawful for any corporation, association, copartnership or person, or by themselves or by their agents, to buy or sell any grain, beef, pork, lard or provisions or to keep or to cause to be kept within this state any office, store or other place wherein is conducted or permitted the buying or selling of grain, beef, pork, lard or provisions either on margins or otherwise where no intention of receiving and paying for the property so bought or of delivering the property so bought or sold is then and there made apparent as a part of the transaction, or wherein is conducted the pretended buying and selling of grain, beef, pork, lard or other provisions on margins or selling and buying on margins or otherwise when the party selling the same or offering to sell the same does not have then and there a duly executed warehouse receipt calling for and describing the grain, beef, pork, lard or other provisions sold or offered to be sold, and in case of the pretended sale of grain, beef, pork, lard or other provisions does not have the ownership or possession of the property sought to be sold or bought, or where the party buying any of such property or offering to buy the same does not intend actually to receive the same if purchased, or deliver the same if sold, and all such sales and the keeping of all such places for making said pretended sales is hereby prohibited. Such sales of grain, beef, pork, lard or other provisions as are not accompanied by a duly executed warehouse or storage receipt as aforesaid, and all pretended sales of grain, beef, pork, lard or other provisions without the ownership or possession by the party offering to sell are hereby declared unlawful and void, whether the said sales are made through a regular Board of Trade or places known as bucket shops.

It is further provided:

It shall not be necessary, in order to commit the offense defined in this act, that both the buyer and seller should agree to do any of the acts hereby prohibited, but the said crime shall be complete against any corporation, association, copartnership or person or persons, or their agents, thus pretending or offering to sell and thus pretending and offering to buy, whether the offer to sell or buy is accepted or not, and any corporation, association, copartnership or person, or his or their agent, who shall communicate, receive, execute or display in any manner any such offer to so buy or sell or any statement or quotation of the prices of any such property with a view to any pretended transaction as heretofore described, shall for every such offense be deemed and held to be an accessory.

This bill makes it the duty of every commission merchant, copartnership, association, corporation, broker or agent to furnish at the time of sale to all customers in the case of sales either for immediate or

future delivery a written statement containing the names of the parties from whom the property was bought, to whom sold, and the time when and the place where, and the price at which the same was either bought or sold. The commission merchant, etc., shall keep a book in which the transaction shall be fully described, which shall be open to the inspection of the judges of the Circuit and Criminal Courts, state's attorney or foreman of any grand jury whenever an examination shall be desired. Any failure to furnish such statements or to keep the required books shall be deemed prima facie evidence that the commodities bought or sold were bought or sold contrary to the provisions of this act. It is made the duty of all the judges of the several Circuit and Criminal Courts at every regular term thereof to charge the regularly empaneled grand jurors to make due investigation and indict all persons violating this act. It is also made unlawful for any corporation, commission merchant, etc., to execute a warehouse receipt calling for a greater number of bushels of grain than is actually stored in said elevator.

The penalty is a fine of from \$500 to \$1,000, and for a second offense the person so convicted may be imprisoned in the penitentiary for not less than one year nor more than five years.

PLACING RESPONSIBILITY FOR FIRES.

There have been, or now are, in the courts numerous suits to which reference has heretofore been made in these columns, looking toward placing the responsibility for fire losses upon transportation companies whose engines are supposed to have furnished the necessary spark, which, under favorable conditions, furnished all that was necessary to start a conflagration.

Ever since locomotives have been in use there has been more or less of this sort of litigation, but there seems to be now an unusual movement looking toward placing upon the railroads a more minute and complete responsibility than ever before. In some cases it is set up that any loss which can be shown to be caused by a spark from an engine makes the railroad company liable regardless of whether or not the company has taken due precautions to avoid such accident. The claim is made that a property owner adjacent to a railroad track is entitled to just the same conditions that would exist if the railroad were not there; and that where those conditions changed, the railroad is responsible for any unfavorable results therefrom.

Yet it seems as if this were a hard doctrine. In multitudes of cases the railroad precedes settlement, the establishment of manufacturing plants or the location of property. There is doubtless a certain amount of inevitable risk attached to a railroad, and where a property owner has deliberately set himself down alongside of the railroad for the transportation advantages which accrue thereby, should he not be willing to accept the necessary risk involved? The railroads should be held to full accountability for the use of all proper and all possible precautions, but such a radical claim as that mentioned above seems hardly just.

These numerous claims and discussions are undoubtedly the outgrowth of the feeling which has been increasing for years, that the railroads have been escaping their due share of responsibility; and within the next few years we are likely to see their true status as relates to other property more accurately fixed than ever before.—*The Timberman*.

OUR CARD BASKET

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

E. G. Cole, Toulon, Ill.
F. Riddell, De Kalb, Ill.
J. S. Kidd, Des Moines, Iowa.
C. H. Adams of the E. H. Pease Manufacturing Company, Racine, Wis.
L. S. Hogeboom, Minneapolis, Minn., representing The Knickerbocker Company.
G. L. Jarrett, Des Moines, Iowa, representative of the Nordyke & Marmon Co., Indianapolis, Ind.

Argentine officials are taking steps toward securing more reliable statistics regarding the crops, etc., of that country. Why not confer with our secretary of agriculture?

Nearly all the flaxseed produced in Manitoba is grown in the district south of Morris to the international boundary and east of the town of Morden to the Red River. This is the district settled principally by the Russian Mennonites, who are the chief growers of flax in Manitoba. With the low price of wheat, evidently a considerable extension of the flax crop in this province would prove an advantage to the farmers.—*Winnipeg Commercial*.

INSPECTORS TO DETERMINE AGE OF GRAIN.

The president of the Chicago Board of Trade has petitioned the Illinois Railroad and Warehouse Commission "to direct that, beginning with July 1 next, in the inspection of wheat, rye and oats, the crop year in which the grain is grown shall be specified on the inspection. In order that grain so inspected may hereafter be kept separate in public warehouses you are also petitioned to appoint a supervising inspector for each public warehouse, and make such increase in the inspection fees as is necessary to accomplish this result."

The inspectors might be able to distinguish between newly harvested grain and that one, two or more years old, but eight months after harvest they would find it very difficult to distinguish between the grain of the last crop and that of preceding crops. Farmers frequently keep grain stored in their barns two or three years. As such grain will not germinate it cannot be used for seed, so must be shipped.

Grain has no teeth, or at least they have not been discovered, and its wrinkles are not reliable indicators of age. If the Chicago Board of Trade is desirous of knowing the age of grain inspected in this market it should appoint a commission to investigate and to discover, if possible, some method of determining the exact age of grain. When the method has been discovered the warehouse commission may grant the petition. If it grants it at present and an attempt is made to enforce the order the transfers from private houses, country elevators and farmers' barns will drive the expert judges of age into the madhouse.

FURNISHING CARS ACCORDING TO CONTRACT.

If a recent decision of the highest court of a Southern state is good law, it behooves the railways of that state to reorganize their methods of doing business. In the case referred to a shipper notified a local agent that at a certain time he would need a stated number of cars and requested that they be furnished. No agreement was made by the agent to comply with his request, he simply agreeing to make known to the proper official the want of cars. The cars were not supplied at the time desired and suit was brought for damages; and it is now held that it is the duty of a railway company as a common carrier, independent of statutory obligation, to provide reasonable facilities and appliances to transport when requested such goods as it holds itself out ready to carry; and that when a request has been made in due time by a shipper of a station agent the law implies an agreement to furnish the necessary cars on the particular day specified. When it is remembered that this is the finding of the highest court in the state, one cannot help wondering how much better than a jury trial is such a hearing.—*Railway Review*.

Over fifty charges have been filed with the railroad commission at Ft. Worth, Texas, alleging discrimination in freight rates in favor of Kansas and against Texas millers and grain dealers.



THE SITUATION.

—From Zahn's Circular, March 9.

Latest Decisions.

Performance of Contract of Sale.

A contract of sale, which requires the goods to be shipped promptly by steamer in October, is performed by placing the goods on October 29 on board a vessel which sailed November 1.—*Schwann vs. Clark, Common Pleas of New York City and County, General Term, 29 N. Y. Supp. Rep. 289.*

Must Furnish Proper Cars.

It is the duty of a railway company, the Court of Civil Appeals of Texas held in the case of Hunt vs. Nutt, to furnish suitable cars for the transportation of freight, and it cannot even shield itself from responsibility by proving that the shipper examined the car and determined as to its fitness to transport his property.—*Business Law.*

Can Transfer Notes of Third Persons Held for Security.

The payee of a negotiable instrument, to secure the payment of which the negotiable notes of third persons have been pledged, the Supreme Court of Nebraska holds (*Waddle vs. Owen, 61 N. W. 731*), may, in the regular course of business, negotiate such instrument and transfer with it the securities, and such action will not amount to a conversion of the securities.

Right of Telegraph Company to Establish Office Hours.

A telegraph company owes no duty to give the sender of a dispatch notice of the office hours at the receiving office if they are established and reasonable; and in the absence of a special contract to send and deliver at once, and of notice to the sender of the regulation and office hours of the receiving office, it is not the company's duty to deliver before such office hours.—*Western Union Tel. Co. vs. Neel, Supreme Court of Texas, 25 S. W. Rep. 15.*

Insurance Companies Are Bound by the Acts of Their General Agents.

It is a dodge of insurance companies in many cases to set up that their agents exceeded their authority and that they are, therefore, not responsible for their acts. But the Supreme Court of Utah holds (*West vs. Norwich, etc., 37 Pac. 685*) that insurance companies are bound, not only by the acts of their general agents, but also by whatever may be said or done by them regarding the contract or risk. General agents it further defines as persons authorized to issue policies to parties seeking insurance, to fix rates and premiums and to countersign, renew and sign the transfer of policies in a certain locality. Through them the company must be presumed to have knowledge of every fact in relation to the insurance or contracts which they write or make.

Bill of Lading Construed.

A bill of lading was executed at Memphis, Tenn., which undertook the carriage of some cotton from that point to Clinton, Mass. It was issued by the "Cairo, Vincennes & Chicago Line, in connection with all trunk lines between Cairo, Toledo, Cleveland, Detroit, Chicago, Buffalo, Pittsburg, Philadelphia, Boston, New York, New England and intermediate points." The United States Circuit Court holds (*Thomas vs. W. St. L. & P. Ry. Co.*) that thereunder the Cairo, Vincennes & Chicago Line had the privilege of selecting its own line of transportation.

This bill of lading also contained a clause exempting the carrier from liability "for loss or damage to any article or property whatever by fire or other casualty while in transit, or while in depots or other places of transshipment, or at depots or landings at point of delivery, or for loss or damage by fire, collision, or the dangers of navigation while on the seas, rivers, lakes or canals."

This clause, it was contended, was invalidated so far as a loss by fire at Cairo, Ill., was concerned, by an Illinois statute providing "that whenever any property is received by a common carrier to be transported from one place to another within or without this state, it shall not be lawful for such carrier to limit his common law liability safely to deliver such property at the place to which the same is to be transported, by any stipulation or limitation expressed in the receipt given for such property." The court declares not. It says that the legislature of a state, in regulating commercial contracts, cannot, in binding effect, go beyond the boundaries of the state; and it does not matter, in this regard, that the franchise to the carrier in question was granted by the legislature of that state. It would have the same rights at any place outside the boundaries of such state to limit its common law liabilities, that are possessed or belong to any other contracting party, natural or artificial.

However, the court further holds, that while the

carrier has the right to limit its common law liability, as was done in this case, its privilege cannot be held to extend to loss of goods, intrusted to it for carriage, caused by its own carelessness or negligence.—*Business Law.*

Liability of Common Carriers as Insurers.

A common carrier is bound by common law principles settled centuries ago, says the Supreme Court of Pennsylvania (*Willock vs. Pennsylvania R. Co., 30 At. 948*), to employ safe and sufficient means of carriage, trustworthy and competent servants, and by himself or his agents to exercise an intelligent supervision over the system of carriage which he employs. He is therefore to all intents and purposes an insurer against such perils of transportation as it is his duty to provide against; and these include all the perils of the journey, except such as arise from "the act of God or the king's enemies." He may by special contract restrict his liability in some respects, but it is a rule of very general acceptance that stipulations, insisted on by carriers or other persons who stand in such a position toward their customers as enables them to compel compliance with their demands or destroy their customer's business, should be judged of by their fairness, and be held void whenever they are unreasonable or oppressive. A stipulation that is intended to protect him in the violation of his contract as a carrier, and in disregarding a settled rule of public policy, will not be sustained.

PUBLIC WAREHOUSEMAN AS A GRAIN DEALER.

The Attorney General of Illinois is in line with the chairman of the Railroad and Warehouse Commission and the members of the Board of Trade, who insist that a public warehouseman should not deal in the grain in his own elevator. A committee of the Board of Trade propounded a number of questions to the chairman of the Railroad and Warehouse Commission last summer. That body was inclined to take plenty of time for deliberation, but finally came out in an opinion sustaining the anti-elevator people in their contention. The chairman of the commission passed the questions submitted to him along to the Attorney General. They are as follows:

First—Has the Board of Railroad and Warehouse Commissioners the power to prevent regular warehousemen in the city of Chicago from dealing in grain through their own warehouses or elevators?

Second—What authority, if any, has the Grain Inspection Department to inspect and grade grain into or out of private warehouses?

Third—Can the Grain Inspection Department be compelled to inspect grain into or out of private warehouses?

The Attorney General's answer to the first question is in the affirmative, but the last two in the negative. In an opinion just returned to Mr. Cantrell he says:

There is no such thing contemplated by the law now under consideration as a private warehouse. With private warehouses your body has nothing whatever to do. The law does not pretend to regulate, control or supervise private warehouses. Your inspectors cannot inspect or grade grain into or out of them any more than they could go down to La Salle county and grade corn into or out of a farmer's corn crib. I am of opinion, therefore, that your department has no authority to inspect or grade grain into or out of private warehouses. This disposes of your second and third inquiries.

To return to the main and really important inquiry, "Can warehousemen deal in grain stored in what the law designates as public warehouses?" My answer is they cannot. I am of the opinion that our law contemplates that a person or corporation owning, controlling, leasing or managing a public warehouse cannot store therein his or its own grain or deal in the same. My reasons for so holding are as follows:

The Legislature divided public warehouses into three classes, A, B and C. Class A is where grain of different persons is stored in bulk or mixed with a like quality of grain. Class B is like class A except it only applies to counties of less than 100,000 inhabitants. Class C embraces all other warehouses or places where property of any kind is stored for a consideration.

The proprietor, lessee or manager of a warehouse of class A, before engaging in that business, must first obtain a license, which shall set forth the location and name of such warehouse and the names of the persons interested, as owners or principals, in the management of the same, or, if owned or managed by a corporation, the names of the president, secretary and treasurer of such corporation; and such license shall give authority to carry on and conduct the business of a public warehouse of class A, in accordance with the laws of this state.

There are many other provisions of law applicable to warehouses and warehousemen of this class, but the foregoing indicates that a person engaged in the business of keeping a warehouse and deriving emoluments therefrom is, in contemplation of law, dealing with other people's property and not with his own.

Indeed it is doubtful if the Legislature possesses the power to regulate or control a man's own personal

property in his own warehouse when he did not propose to store or mingle it with the property of others, except that under the police power it would have the right to see that such storage was not likely to work a detriment to others or to the community at large. I have heretofore stated what characterizes a warehouse as a public one is the fact that compensation is demanded and paid for the storage of grain. If a person or corporation desires to erect a warehouse or elevator and store his or its grain therein and sell the same, he or it can do so. The law does not prohibit persons from owning elevators, storing their own grain therein, and disposing of the same, but your body has no power or authority to interfere therewith in any way. You cannot inspect or grade it, and for the all sufficient reason, as above stated, it is not property stored in a warehouse regulated by law.

Now, if a warehouseman of class A can, under our law, own grain, have it graded, mixed with other grain of third parties, and stored in his own warehouse and have a receipt issued therefor to himself, we have the strange anomaly presented to us, viz.: that of a man compensating himself for storing his own grain in his own warehouse and at the same time contracting with himself.

I have carefully examined every case decided on this subject, as well as the decisions by our own courts, found in the reports of the courts of last resort of Michigan, Kentucky, Iowa, Minnesota, Federal and United States Supreme Court reports, with the above result. I am, therefore, of the opinion that the owner, lessee or manager of a public warehouse of class A cannot store his own grain therein or issue receipts to himself, and if he attempts to do so it is the duty of the board to prevent it, and this it can effectually do by refusing to inspect or grade such grain.

In this connection I have not called attention to considerations of public policy, and they are all potent, which would prevent a warehouseman from thus storing and mixing his grain with that of his depositors, and for the reason that in my judgment the statutory provision plainly prohibits his so doing.

AMENDMENTS FOR MINNESOTA'S ELEVATOR LAW.

A bill has been introduced in the Minnesota Legislature which embodies all that the administration will ask this year in the way of grain legislation. It was drawn up by the state grain inspection department, and introduced by Mr. Gibbs at the request of A. C. Clausen, chief inspector. The administration bill of two years ago was defective in various places and the Gibbs bill seeks to remedy these defects. The country people have had considerable trouble with the railroads regarding the construction of the 1893 law. For instance, the law provides for public elevators along rights of way, and the railroads have held that this did not mean elevators on depot grounds. The Gibbs bill straightens out this matter. Coming from the grain inspection department, without doubt reflecting the best thought of the administration in the matter of grain legislation, the bill will be of general interest all over the state.

Section 1 re-enacts the 1893 law, adding the words, "depot grounds," so as to cover the point just referred to. Section 2 provides for licenses for these public country elevators. By section 3 the railroad and warehouse commission, before September 1, each year, and as much oftener as necessary, is to make rules for the government of these elevators and establish rates. By section 4 the elevator owner is to keep correct accounts of the grain received and shipped, stating grade and dockage for dirt, etc. Receipts are to be given for all grain received, and are to state on their faces all necessary facts in connection with the grain, facts which the owners think they have hitherto had some difficulty in having made public. When the owner wants his grain he presents his receipt and the elevator company must turn the grain over to him within twenty-four hours from the time of the demand. Or, if the owner wants his grain shipped to a terminal point, the elevator must make such shipment promptly, and at as small cost as is possible. "No receipt shall contain language in any wise limiting or modifying the liability of the party issuing the same, and any such language, if inserted, shall be null and void."

Under section 5, if there is a difference between the owner of the grain and the elevator company as to grades, etc., the state department of grain inspection is to be appealed to as arbitrator.

Section 6 provides that in case of complaint that the country elevator does not give just weights and grades, or is unfair as to dockage, etc., the railroad and warehouse commission is to make prompt inquiry, and to this end is to have full access to all records, books, etc. Section 7 says that all country elevators shall, whenever requested, furnish itemized statements and full reports of all grain received and stored or shipped. Section 8 prohibits pooling on the part of charter companies. Section 9 provides a penalty—\$50 to the \$500 fine.

The bill is long and filled with innumerable details, all bearing upon the main points alluded to. It is designed to be amendatory to the 1893 act, and the grain inspection department believes will so perfect that act as to perfectly satisfy the farming community.

WATERWAYS

Last month 69 vessels loaded with wheat and flour set sail from Portland, Ore., for European ports.

The steamship *Rosedale*, loaded with 5,000 bushels of wheat, sank in the Wabash River recently.

Panama Canal affairs are said to be more chaotic than ever; with workmen striking and quitting work practically no progress is being made.

Wm. F. Barker of Oswego, N. Y., purchased the large cargo of wheat in the sunken steamer *Hartford*, and says he can market the entire cargo at 25 cents per bushel.

The navigation committee of the Chamber of Commerce of Cleveland, Ohio, has adopted resolutions condemning the project of the Lake Erie and Ohio River Canal as a physical impossibility.

The proposed canal between Lake Erie and the Ohio River is to be undertaken (if at all) with private capital. It is blandly stated that the project meets with opposition. Some persons seldom take kindly to being swindled.

The "puny voice" of the *Canal Defender's* infancy is past. The paper has entered on its second year and can be credited with doing good work where good work was needed, being not only a *Defender*, but a staunch aggressor in the right direction.

A company has been incorporated at Cleveland, Ohio, to run a line of 18 steel canal boats, towed in fleets of six boats each, between Cleveland and New York City. The profits are supposed to come in through evading the extortionate rates at Buffalo, but the financial success does not seem assured.

From a geographical point of view there are many arguments in favor of the proposed deep-water route from the great lakes to the Atlantic Ocean. Look at a map of North America. Half way across the continent the St. Lawrence River and the great lakes offer a route that can be paralleled nowhere else on the globe, offering as they do the largest system of deep-water navigation, bearing so vast a commerce and being the natural outlet of such an immense grain growing territory.

The canal improvement bill appropriating \$9,000,000 for the improvement of the Erie Canal has passed the New York Assembly, and for the bill to become a law it requires the favorable vote of the people. In view of the preposterous canal schemes which have time and again received more or less governmental encouragement, it is rather surprising that it has taken years to bring the movement for the improvement of the Erie Canal to its present stage. No one doubts, however, that it will now be voted upon favorably.

A vesselman at Superior, Wis., believes that lake navigation can be carried on the year round if each principal port will supply itself with ice crushers. He says: "It is simply a matter of saving a couple of hundred per cent. on every ton shipped by water. The water rarely freezes in the lake before February 1; it didn't this winter, which was exceptionally cold. A little cooperation and animation among the shippers will accomplish much." Winter navigation of the lakes will insure constant work for the boat builders.

The excessive charges for trimming the canal boats at Buffalo were accountable for the failure to hire trimmers when they could be done without and the building of boats that would not need trimming. The new 75-cent rate will bring more work to the scoopers than the old \$1.25 rate ever did. As the new shoveling rate cuts off all rebate abuses in grain elevation it is now demanded that a clean sweep be made and the rebates paid by the insurance agents to the grain receivers be cut off, too. The rebate has been increasing every season lately till it is now \$5 a boat-load.

One of the provisions of the sundry civil bill which has become law is a measure providing for an international commission to investigate and report upon routes for a deep-water channel from the great lakes to the ocean. A commission of three will be appointed to sit with a like commission from Canada or Great Britain, if such be created. These commissions will investigate as to the interests to be served and benefited, what arrangements may be made for constructing and maintaining the work jointly by the two countries. It is proposed that the waters of the great lakes be open and free to vessels of both countries.

The plan for the deep waterway connecting the great lakes with the Atlantic Ocean involves the discharge of the waters of Lake Erie, Lake Ontario, the St. Lawrence River and Lake Champlain into the Hudson River. Canals would, therefore, be necessary between the Hudson River, near the head of tidewater navigation, and Lake Champlain; between the head of Lake St. Francis and the St. Lawrence River above the "Long Sault" Rapids, and between the Niagara River near Lewiston and some point on the same river

above Niagara Falls. Many other natural difficulties will have to be overcome, and while the inducement is undoubtedly great, the project is an immense one even to contemplate.

At a meeting of the canal boatmen at New York City, February 27, resolutions were passed which ought to arouse the interest of the elevator pool at Buffalo. In view of the fact that "the practice at Buffalo of forcing canal grain to pay 30 to 50 per cent. dividend on 25 old, rotten, useless, idle elevators has been the cause of driving many millions of bushels of grain away from the Erie Canal," and that the combine "brazenly and defiantly ignores the state elevator law," it was resolved that the boat owners pledge themselves to support the movement to build transfer elevators at Buffalo and transfer grain from boats for $\frac{1}{2}$ cent a bushel. It was also resolved that before proceeding further in this move a committee proceed to Buffalo to call upon the Western Elevating Association and ascertain if they intend to comply with the state grain elevator law or not.

The great Manchester Canal, which has cost about \$75,000,000, seems to be in danger of being gobbled up by the railroads in much the same way as has happened to canals of lesser pretensions in Pennsylvania, says the *Philadelphia Press*. At least the Manchester Canal is not a paying institution, and there is talk of the British railroads buying it to get rid of competition. The immense traffic which the canal was to be burdened with has not made its appearance. Manchester came to the relief of the canal company when the undertaking was near a failure, and invested altogether about \$25,000,000 in it. This makes it necessary for that city to maintain the canal, and it is estimated that it will have to levy a tax for that purpose which will amount to 41 cents on every \$5 on the total value of all property in the city limits.

INDIAN CORN IN AUSTRALIA.

London *Colonies and India* says: "Although the cultivation of maize is practically unknown in the old country, it is largely carried on in several parts of Australia, especially in Queensland and New South Wales. In the latter colony the cereal ranks as a leading crop, being second only to wheat in importance and productiveness, and forming the staple product of the numerous valleys watered by the coastal rivers north and south of Sydney, the moist soil and warm climate of these being admirably adapted for maize cultivation. In other districts, not too elevated, and where the means of irrigation have been provided, maize is found largely grown, but less productively than in the coastal regions.

"The cereal is largely used as food for horses, cattle, pigs and poultry, and in the dairy farming districts its value in the production of beef, pork and milk has long been unreservedly recognized. As an article of human food it is comparatively little known, and it is in this respect that Australian maize consumption differs from that of the United States, where the cereal is largely utilized in the form of 'johnnycakes,' porridge and puddings, maize or corn flour being found in almost every household. If its use in this manner became general in Australia the demand would be found enormously increased.

"At the beginning of 1862 the area under maize cultivation was 57,959 acres; at the beginning of 1894 it was 205,885 acres, having become nearly quadrupled in little more than 30 years, the product during the same period rising from 3,389,505 bushels to 7,067,576 bushels. Although the crop is easily grown and there is an abundance of land suitable for its cultivation, the local supply is unequal to the local demand, and has to be supplemented by imports from elsewhere. This is occasioned largely by the more remunerative character of other kinds of agricultural crops. In 1893 the quantity of maize imported into New South Wales, principally from Queensland and New Zealand, was 166,841 bushels, of which only 3,703 bushels were re-exported. If a market for Australian maize could be found in the United Kingdom its cultivation would be considerably extended.

"If the fattening value of maize as a food for cattle, pigs and poultry was more generally understood in the United Kingdom, a large demand would rapidly spring up and assist in further developing the already extensive commercial intercourse subsisting between Great Britain and her flourishing colonies in the southern hemisphere."

Shippers should make it a rule to load only one grade of hay in a car. A dealer at Kansas City recently sold a car of wild hay that was car-door inspected slough grass. It was sold as slough, but the buyer found that it was mostly fancy upland prairie. The seller laid claim for the difference in price, about \$2, but failed to get it.

The thief who was arrested recently for stealing 20 bushels of oats from the Southern Grain Company of Kansas City has been sentenced to 100 days' imprisonment, and one cause of shortages will be stopped for a while. If more of such thieves were caught and justly punished a great nuisance to the grain trade would be remarkably lessened.

Fires, Casualties, Etc.

Tallman & Evans, grain and implement dealers at Herrick, Ill., sustained a heavy loss by fire February 15.

Frailly's elevator and other property at Herrick, Ill., was burned February 15, entailing a loss of \$10,000.

J. B. Wathen & Co.'s distillery at Louisville, Ky., was burned recently. Loss about \$75,000; insurance \$35,000.

The Huskins elevator at Voss, N. D., was burned recently, together with considerable grain stored therein.

Mrs. Eliza Rinehart's grain warehouse at Hancock, Md., was destroyed by fire recently, together with 4,000 bushels of grain.

Edson's new elevator and cleaning house at Belle Plaine, Iowa, was recently destroyed by fire. Loss \$13,000; insurance \$6,000.

Fire in the linseed oil mills at Cedar Rapids, Iowa, February 23, caused a loss of \$10,000, which was partially covered by insurance.

H. A. Hogmire's warehouse at Avon, N. Y., containing 150 tons of hay, was burned February 26. The loss is partly covered by insurance.

The Van Dusen elevator at Appleton, Minn., was destroyed by fire recently, together with 6,000 bushels of wheat. Loss \$5,000; fully insured.

W. J. Riley's hay warehouse at Indianapolis, Ind., was recently destroyed by fire together with 300 tons of baled hay. Loss \$2,500; covered by insurance.

G. Vanarsdalen's grain warehouse at Prescott, Iowa, was destroyed by fire recently together with about 10,000 bushels of seed oats and 200 bushels of corn stored in the building.

G. Carter, Son & Co.'s warehouse at St. Mary's, Ont., was destroyed by fire February 13. Part of the contents, which consisted of grain, flour, etc., was saved. The loss was \$3,500, covered by insurance.

S. W. Cissna & Co.'s elevator at Washington C. H., Ohio, was destroyed by fire last month, together with one car of wheat, one car of corn and 450 bushels of cloverseed. The loss is estimated at \$4,200; insurance \$3,500.

J. V. Allen & Son's elevator at Virginia, Neb., was recently destroyed by fire, together with 2,500 bushels of wheat and corn. The loss is estimated at \$5,000, and an insurance of \$2,800 was carried. The fire is supposed to have started in the engine room.

The elevator located nine miles from St. Paul, Neb., was destroyed by fire February 27, together with 1,000 bushels of oats and corn. It is thought that the fire was incendiary. The loss on the building was \$2,500, on the machinery \$500, and on grain \$500; total insurance \$2,300.

H. C. Rosebury, grain and feed dealer at Temple, Texas, sustained a heavy loss by fire February 15. The fire started in the storeroom and destroyed the building, which was valued at \$1,000 and on which there was no insurance. The loss on the contents was \$700, fully covered by insurance.

Armond Austin, a 12-year-old boy, was suffocated in wheat at Cartwell's elevator at Uniontown, Ky., recently. The boy climbed into a hopper on the third floor without anyone being aware of it. Wheat was wanted from the hopper, and he went down with it and was dead when found. The boy's father is an employe at the elevator.

Mr. John Kruchten of the firm of Walter & Co., grain dealers at Cincinnati, Ohio, had a narrow escape from death recently. He was crossing the C. & O. tracks in a wagon, when he was struck by a train and thrown nearly 75 feet. He was unconscious for some time, but was not seriously injured and is now recovered. A suit for damages may follow.

Two grain warehouses belonging to Schwabacher Bros. and Dement Bros., millers, were destroyed by fire at Walla Walla, Wash., February 13. The Dement Warehouse contained 22,000 bushels of wheat, which is almost a total loss. The buildings and wheat were insured for \$6,000. The loss is estimated at \$8,000. The fire is supposed to have been caused by tramps who made the building their rendezvous.

W. S. Sturgeon, Heyworth, Ill., writes: "I subscribed for the *AMERICAN ELEVATOR AND GRAIN TRADE* last January and am well repaid for the small cost of so ably edited a grain journal."



The Baltimore Corn and Flour Exchange has adopted the grading of hay as established by the National Hay Dealers' Association.

The board of arbitration of the Winnipeg Grain Exchange had not a single case to consider last year, which would be an exceptional record for any exchange.

A petition with over 300 names signed to it was recently presented to the directors of the Chicago Board of Trade praying for a withdrawal of the prohibition on put and call trading.

Secretary Geo. M. Lane has sent us a copy of the annual report of the Detroit Board of Trade. It is an interesting report and contains a historical sketch of the Board of Trade, by the secretary.

We are indebted to the Buffalo Merchants' Exchange for the annual report of 1894, wherein are given statistics of the trade and commerce of Buffalo, N. Y., as compiled by Secretary William Thurstone.

The grading and classification of hay and straw established by the National Hay Dealers' Association is being quite generally adopted. While some Exchanges still hesitate about adopting the rules in toto many more have done so.

At a recent meeting of the Buffalo Merchants' Exchange action was taken against the Brown bill in the New York Legislature. This bill provides for the taxation of all grain bought by option 1 mill per bushel, and all flour so bought 5 mills per barrel.

The Call Board Association of the San Francisco Produce Exchange has decided that Walla Walla wheat will hereafter be called on the Board. This step was taken on account of the large quantities of Washington wheat being shipped to San Francisco.

An effort is being made to have the rules of the Chicago Board of Trade amended so as to have thirty, sixty and ninety days futures instead of six to twelve months as at present. This will require deliveries every thirty days, and it is claimed that business will be materially increased.

There will be a conference at the Department of Agriculture at Washington, April 15, to devise means to secure a better system of crop reports and to prevent leakages. It is hoped there will be delegates from all commercial exchanges to confer with Secretary Morton on that occasion.

The following inspectors have been appointed by the Baltimore Corn and Flour Exchange: Grain inspectors, Charles McDonald, chief; Henry E. Grape, first assistant; C. J. Grumbine, second assistant; S. D. Thomas, Joseph Wirth, Lloyd Dorsey, inspectors Flour inspectors, Jonas Winter Jr., Wm. H. Mauler, Milton A. Smeak.

The Buffalo Merchants' Exchange adopted the standard grades of hay of the National Hay Dealers' Association. It was suggested that storehouses be built for hay and straw, so that carload consignments may be unloaded and inspected, and a committee will confer with the railroad companies and ask for their cooperation in the plan.

The Buffalo Merchants' Exchange recently passed resolutions establishing a hay committee, which will consist of three receivers or commission merchants and two dealers or feed store men. An arbitration committee has been formed of the members of this committee, and to it will be left all disputes arising between buyer and seller.

At a recent meeting of the Baltimore Corn and Flour Exchange a committee of five was appointed to consider existing conditions of the grain and flour trade of that city. Investigation will be made as to differential rates, terminal charges, etc., for it is said that the grain trade of Baltimore is being diverted to New York, Philadelphia and Newport News.

The following appointments of boards of examiners have been made by the Montreal Corn Exchange: Wheat and other grain, R. M. Esdaile, Auguste Girard, A. G. McBean, Robert Peddie, Adam G. Thomson. Hay, Jno. Crowe, Wm. Cunningham, C. B. Esdaile, Jos. Quintal, Jos. Robillard, Flour and meal, A. E. Gagnon, W. A. Hastings, J. E. Hunsicker, Jas. S. Norris, J. Lionel Smith.

The relief committees on the Chicago Board of Trade are hard at work soliciting funds to buy grain for the drouth stricken farmers of the West. Urgent requests for seed have been coming in much faster than funds. Forty-nine counties in Nebraska must be helped out. It is not a request for charity, as the funds are loaned on mortgages on the next crop, which promises to be a good one, considering the present nature of the soil. The Rock Island road will con-

tribute \$30,000 and transport all seed free. Other roads are expected to do the same.

A delegation of ten members of the Chamber of Commerce of Cincinnati, Ohio, came to Chicago recently to investigate the system of weighing grain at the leading elevators and visit the Board of Trade. The party consisted of Adam Amyrl, Frank J. Collins, John H. Allen, W. W. Granger, W. Lee Early, J. P. Gale, William McAllister, D. W. Hart, Chris S. McGuire and Charles S. Fisher.

The annual meeting of the Superior, Wis., Board of Trade was held February 28. An exciting election was held, there being four tickets in the field. The following officers were elected: President, C. J. McCollom; first vice-president, W. B. Banks; second vice-president, C. H. Sunderland; directors for three years, R. J. Wemyss, S. G. Williams, H. W. Gilbert; for two years, Wm. Listman, D. W. Twohy. An amendment to the rules was adopted making the offices of secretary and treasurer appointive.

CHARGES AGAINST PUBLIC ELEVATOR MEN OF CHICAGO.

Another move has been made by the Chicago Board of Trade against the public elevator men who deal in grain stored in their own house. At a meeting of the Illinois Railroad and Warehouse Commission in Chicago, March 8, the following petition was presented by John Hill Jr. of the Board's warehouse committee:

To the Honorable Railroad and Warehouse Commission of the State of Illinois, Springfield, Ill.—Gentlemen: At a regular meeting of the board of directors of the Board of Trade of the city of Chicago, held Tuesday, March 5, 1895, the following resolution was adopted:

Resolved, That the warehouse committee of the board of directors be instructed to place before the Railroad and Warehouse Commission of Illinois all the evidence which the Board of Trade, or any of its members or committees, may have in their possession relating to the present methods employed by the warehousemen of this city, with a view of having the said commission cancel and revoke the license of such warehousemen as, either directly or indirectly, violate any of the provisions of the railroad and warehouse law of this state.

The undersigned, the warehouse committee of the Board of Trade of the city of Chicago, in accordance with the above resolution, hereby makes application to your honorable commission, under the provisions of Sec. 178 of the railroad and warehouse law of the state of Illinois, to cancel and revoke the licenses of the following grain warehouses of class A located in the city of Chicago for violating the law of this state concerning the business of public warehouses, as per charges filed herewith:

Armour Elevator Company.
Central Elevator Company.
Chicago and Pacific Elevator Company.
Charles Counselman & Co.
A. C. Davis & Co.
Illinois Trust and Savings Bank.
The Chicago Railway Terminal Elevator Company.
George A. Seaverns.
National Elevator and Dock Company.
South Chicago Elevator Company.
Santa Fe Elevator and Dock Company.
Keith & Co.
Chicago Elevator Company.

The undersigned beg to respectfully submit, in addition to the foregoing, to the honorable Railroad and Warehouse Commission that a person engaged in the business of keeping a warehouse and deriving emoluments therefrom is in contemplation of law dealing with other people's property and not his own, and that consequently for a public warehouseman to deal, either directly or indirectly, in the kind of property of which he is a public custodian under the provision of the warehouse law of the state is a violation of law and contrary to public policy.

And the undersigned further request your honorable commission that it grant an opportunity to present such information, oral and written, concerning the grain elevators in the city of Chicago with a view to determining whether the provisions of the railroad and warehouse law are being complied with, and whether these elevators and warehouses are conferring the benefits upon the public as defined in and designed and contemplated by the law, or whether they are to any great extent, or to any extent, conducted with a view of prosecuting a private enterprise and a private business in distinction from the public service. Respectfully,

JOHN C. ROSS, Chairman.
JOHN HILL JR., Committee.

Mr. Hill then said the charges were exactly similar against the Armour Elevator Company, the Central Elevator Company, Charles Counselman & Co., A. C. Davis & Co., the Chicago Railway Terminal Elevator Company, the South Chicago Elevator Company, the Santa Fe Elevator and Dock Company, Keith & Co., and the Chicago Elevator Company. As a specimen he read the following:

The undersigned hereby charge the Armour Elevator Company with violating the railroad and warehouse law of the state of Illinois in that the said

Armour Elevator Company is guilty of dealing, either directly or indirectly, in grain stored in warehouses, designated by the law as public warehouses, operated by them; and the undersigned hereby respectfully petition the honorable commission to set a time for hearing this charge, and for the determination of the application for canceling and revoking the licenses issued to the Armour Elevator Company for carrying on the business in this state of public warehousemen. Respectfully,

JOHN C. ROSS, Chairman.
JOHN HILL JR., Committee.

Mr. Hill further explained that the charges were exactly similar against the National Elevator and Dock Company, the Chicago and Pacific Elevator Company, George A. Seaverns, and the Illinois Trust and Savings Bank. As a specimen he read the following:

The undersigned hereby charge the National Elevator and Dock Company with violating the railroad and warehouse law of the state of Illinois in that the said National Elevator and Dock Company is dealing, either directly or indirectly, in grain stored in warehouses, designated by the law as public warehouses, operated by them.

The undersigned further charge the said National Elevator and Dock Company, acting under the license granted it by the state of Illinois as public warehousemen, with transacting its business mainly and principally for private gain and not for the public good, in that most of the grain stored in warehouses operated by said National Elevator and Dock Company is the property of the said National Elevator and Dock Company, and that, therefore, the said National Elevator and Dock Company is of such small benefit that its license should be revoked and canceled herewith.

And the undersigned hereby respectfully petition the honorable commission to set a time for hearing these charges and for the determination of the application for canceling and revoking the license issued to the said National Elevator and Dock Company for carrying on the business in this state of public warehousemen. Respectfully,

JOHN C. ROSS, Chairman.
JOHN HILL JR., Committee.

The commission took the charge under consideration, promising to serve notices on the accused parties and to arrange for a trial of the issues at as early a day as possible.



T. J. Patterson is again in the grain business at Galloway, Ill.

E. F. Rossette is in charge of Horn & Co.'s grain warehouse at Broadway, Ohio.

F. H. and J. F. Peavey of Minneapolis have returned from their tour of the Pacific Coast.

C. B. Gardner has resumed his work at Cowdery & Wheeler's grain elevator at Mantorville, Minn.

J. H. Dickun has been appointed weighmaster at Poppen & Hayunga's elevator at German Valley, Ill.

William Hotsenpiller has taken charge of Haynes & Kirkpatrick's grain and coal business at Ballard, Ill.

James D. Parrott has been appointed a representative of the Brinson-Judd Grain Company at St. Louis, Mo.

F. W. Reynolds is in charge of the Minneapolis and Northern Elevator Company's house at Bathgate, N. D.

Mr. W. E. Murphy has been placed in charge of Bartlett, Kuhn & Co.'s elevator and warehouse business at Tuscola, Ill.

Wyan Nelson, a well known grain man of Kansas City, Mo., has been appointed treasurer of the French Bros. Commission Company.

D. W. Reed, formerly of the Kansas City Grain Company, has been engaged by a Chicago grain company, for whom he will go on the road.

The engagement is announced of Wm. J. Bettingen and Miss Mary C. McFerran. Mr. Bettingen is a member of the grain firm of Ryan, McKeown & Co. of Duluth, Minn.

John H. McMillan of the grain and elevator firm of D. D. McMillan & Co., Ft. Worth, Texas, was recently married at La Crosse, Wis., to Miss Edna Cargill, daughter of W. W. Cargill, the well-known elevator man of that city.

The Illinois Railroad and Warehouse Commission recently decided that one railroad cannot compel another road to furnish terminal facilities.

ITEMS FROM ABROAD

Fendam & Co., grain merchants at Sebastopol, Crimea, have failed for about \$180,000.

The imports of wheat into France during January were 3,240,000 bushels, of which 2,440,000 bushels were from Russia and Roumania.

The Roumanian minister of public works has decided to build docks and floating granaries in the ports of Galatz, Braila and Sulina.

The total rice exports of Burmah in 1894 amounted to 1,408,196 tons. Less than half of this was shipped to Europe, 727,000 tons being sent to India, the Straits and China.

With a view to facilitating the export of cereals from Russia, the government has decided to make the state railways responsible for any shortage in the weight of grain conveyed in bulk by railway over the Russian frontier.

The *Review of the River Plate* of Buenos Ayres states that the yield of wheat in Argentine is disappointing, and that the exports from that country will not exceed 1,000,000 tons this year, over 600,000 tons less than in 1894 and over 8,000 tons less than in 1893.

At a recent meeting of the Land Owners' League at Berlin a resolution was adopted which advocated a state monopoly of the purchase of all imported grains. Prince Bismarck has declared in favor of the move, and a law may be passed which will prohibit all private or individual importations.

It is suspected that France is thinking of making some severe restrictions on American imports, and that wheat is likely to be barred by excessive duties. The United States ambassador writes that such are not contemplated as retaliatory measures, but rather as protection to the agricultural classes, which are dissatisfied.

Among the principal exports from Argentine in 1894 are the following, which are estimated in tons and compared with exports in 1893: Wheat, 1,608,249 tons in 1894, against 1,008,187 in 1893; maize, 54,876, against 84,514; oats, 673, against 1,132; rye, 2,982, against 1,479; linseed, 104,435, against 72,199; canary seed, 1,182, against 109; flour, 40,758, against 37,921; hay, 47,617, against 53,523.

It is reported that, while the oleiferous seed sowings in some sections of India have been hindered by bad weather, wherever possible the acreage has been increased. The flaxseed prospects in Bombay and the Northwestern Provinces are generally good; in the Central Provinces and Berar, fair. With seasonable weather there will probably be a good crop in Berar and a nearly average crop in the Central Provinces.

In the annual report of the Bristol Channel and West of England Corn Trade Association the committee recommended the adoption of the following rule by the association: "Unless a seller give an express guarantee or warranty he shall not be held to guarantee or warrant the fitness, for any particular purpose, of any grain, flour or cake sold by him, or its freedom from injurious quality, or from latent defect, and if the sale be made by a contract or note in writing, or by a contract of which a written or printed note is at the time delivered to the buyer (whether signed by him or not), the seller shall not be held to give a guarantee or warranty unless the same be expressed in the contract note, or memorandum, signed or delivered as aforesaid."

Sweden's imports from Aug. 1, 1894, to February 1, as compared with those of the same time in the preceding year were as follows: Wheat, 529,000 quarters, against 303,000 quarters; rye, 556,000 against 177,000 quarters; maize, 37,000 quarters, against 19,800 quarters (all of 480 pounds each); barley, 57,500, against 24,000 quarters (of 400 pounds each); flour, 185,000 sacks, against 140,000 sacks; rye meal, 132,500, against 94,000 sacks. The exports included the following: Oats, 461,000 quarters, against 662,000 quarters (of 340 pounds each) the previous year; barley, 4,053, against 19,500 quarters; wheat, 100, against 105 quarters; rye, 210, against 500 quarters; flour, 770, against 1,430 sacks; rye meal, 140, against 80 sacks.

An investigation of the Russian crops seems to justify the belief that the wheat fields have been but little injured thus far. In the governments of Wilna, Kovno and Grodno the unsettled weather is complained of, the alternations of frost and thaw being damaging. But great damage had up to February 26 been escaped, the frosts not being likely to affect the plant. In Southwest Russia the position is said to be favorable. The depth of the snow throughout the great wheat region which lies between Moscow and the Roumanian frontier averages a couple of feet. The mice plague in Southern Russia is decreasing. In Southeast Russia, including Caucasia and Russian Armenia, the weather has been very dry. Recent reports make

no reference to the allegation of earlier reports, viz., that the area under winter wheat was materially reduced.

Germany's wheat importations during the last three years are as follows, estimated in double centners, about 220 pounds each: In 1892, 10,034,546; 1893, 5,829,169; 1894, 8,928,137. The source of these importations are, from the United States, in 1892, 5,302,130; 1893, 3,419,282; 1894, 3,054,669; from Russia, 1892, 2,572,991; 1893, 216,362; 1894, 2,354,459; from Argentine, 1892, 661,697; 1893, 1,513,981; 1894, 3,196,190; from British India, 1892, 509,081; 1893, 29,691; 1894, 87,732; from Austria-Hungary, 1892, 436,730; 1893, 237,834; 1894, 189,312; from Bulgaria, 1892, 434,727; 1893, 179,751; 1894, 42,778; Canada, 1892, 117,190; 1893, 32,268; 1894, 2,997.

DIFFERENCE BETWEEN DULUTH AND LIVERPOOL PRICES.

R. C. Burdick of the Minnesota State Railroad and Warehouse Commission, in a recent letter to *The Representative*, Ignatius Donnelly's paper, writes:

In your issue of February 27 appears a letter written by William M. Delles of Corcoran, in which appears the following:

"I would like to have you settle one point in which we cannot agree. When wheat sells in Minneapolis or Duluth at 60 cents per bushel, the same grade will be quoted the same day in Liverpool at say 5s. 5d., a difference of about 60 cents a bushel, which cannot all be accounted for as freight. I claimed that their bushel was the same as ours, but one of my opponents contended that the English bushel was 100 pounds, which would, of course, make a great difference in my argument."

As I am somewhat conversant with this matter, I will, with your permission, endeavor to explain it to Mr. D.

All quotations upon wheat in Liverpool are per cental (100 pounds) and not per bushel, and the quotation of 5 shillings and 5 pence (which is equivalent to \$1.30 American currency) is per cental, which is equivalent to 78 cents per bushel, the American and English bushel being the same. Again, this quotation of 78 cents per bushel means "delivered in the granary" and not on the vessel in which it is shipped, nor upon the dock at which the vessel discharges her cargo, and their method of handling wheat is so complicated and cumbersome, and it passes through so many hands, that from the time it is unloaded from the vessel until its final delivery to the granary, a charge of about 4 cents per cental, or, in round numbers, 2½ cents per bushel, has accrued, so really this quotation of \$1.30 per cental means only about 75½ cents per bushel "at the ship's side," or, as it is technically termed, "c. i. f." (cost, insurance and freight).

For the purpose of further explanation, we will take a bushel of wheat from Duluth at the price he quotes (60 cents) to Liverpool and sell it at his quoted price, \$1.30 per cental or 78 cents per bushel, bearing in mind the fact that these quotations are "from the elevator in Duluth to the elevator or granary in Liverpool."

	Cents.
Cost in elevator at Duluth.....	60.00
Elevator charges, inspection and weighing at Duluth.....	00.85
Freight, all rail, Duluth to New York, 30 cents per 100 pounds.....	18.00
Elevator charges, loading, trimming, etc., New York.....	01.00
Ocean freight, New York to Liverpool.....	08.50
Marine insurance, New York to Liverpool.....	00.25

Cost at ship's side in Liverpool.....	83.60
Add dockage, prime, commissions, weighing, transferring to granary, etc., etc.....	02.50

Cost delivered in granary at Liverpool..... 86.10

Now, these figures may prove a surprise to Mr. D., but taking his quotations as the basis, they are correct and challenge the closest scrutiny.

While upon the subject it may be well to allude to the manner in which this business is transacted in London. In London the market quotations are based upon the "quarter." This quarter varies according to the kind of grain, as well as its point of shipment. To illustrate: Australian, Argentine, Chilean, Egyptian, all Russian (except Ghirkas and St. Petersburg), and all American (except California and Oregon) wheat, all American corn, rye, beans and millet contain 480 pounds per quarter. Calcutta, Bombay, Kurachee (or Ryot). Ghirka and St. Petersburg wheats contain 492 pounds per quarter. California and Oregon wheats contain 500 pounds per quarter. Barley contains 400 pounds, peas 504 pounds and oats 304 pounds each per quarter.

All American wheats, unless otherwise specified, are sold "c. i. f." (cost, insurance and freight paid), or delivered at the ship's side, all subsequent charges being assumed and paid by the purchaser.

The first cargo of wheat from the Pacific Coast to New York in thirty years was shipped last month, this shipment consisting of 80,000 bushels. Wheat in San Francisco is only 4 cents lower than in New York, which is much less than the transportation charges. It is conjectured that the wheat is wanted for breakfast foods, it being specially suited for that purpose.

THE MARKETS.

We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.

GRAIN REPORT OF PH. BENZ & Co., Chicago, March 12.—The season is now commencing for grass seeds in general to be placed on the market. The general outlook is bright, and it is the general impression that seeds will sell at good figures, as there does not seem to be an over-production. Nineteenths of the crop of barley has been marketed, and farmers rather than sell at a low price prefer to feed it. Oats is a good article and prices will probably remain unchanged.

GRAIN REPORT OF SHANKS, PHILLIPS & Co., Memphis, Tenn., March 12.—The extremely severe weather of the past thirty days practically put an embargo on commerce in this belt, but reappearing sunshine the present week has restored normal conditions, and the movement of cereals is reasonably large, and at improved prices in most branches, with wheat and flour clearly in the lead, both as to volume and price. Quotations in round lots from first hands are as follows: HAY.—Choice Timothy \$12.00@12.25; No. 1 Timothy \$11.00; No. 2 Timothy \$9.50; Choice Clover Mixed \$11.75; No. 1 Clover Mixed \$10.50; No. 2 Clover Mixed \$9.00; Choice Kansas Prairie \$9.50; No. 1 Kansas Prairie \$8.50; No. 2 Kansas Prairie \$7.50; Choice Arkansas Prairie \$6.50. CORN.—No. 2 White 47 cents; No. 2 Mixed 46 cents; No. 3 White 46 cents; No. 3 Mixed 45 cents. OATS.—No. 2 White 34½ cents; No. 2 Mixed 32½ cents; No. 3 White 33½ cents; No. 3 Mixed 31@31½ cents. WHEAT BRAN.—Large sacks \$14.50 per ton; 100-pound sacks \$14.75. WHEAT.—No. 2 Soft Red Winter 59@60 cents. FLOUR.—Winter Wheat Patent in wood, \$2.90@3.00; Extra Fancy \$2.70@2.75; Fancy \$2.40@2.50. CORNMEAL.—Standard Roller in wood, \$2.10; Standard Roller in 48-pound cotton sacks 50 cents per sack. CORN CHOPS.—One hundred pound sacks \$17.00. GERMAN MILLET.—Per bushel \$1.00.

GRAIN REPORT OF COLLINS & Co., Cincinnati, March 9.—Manifestly more confidence in the future outlook for improved trade conditions is becoming daily more apparent; a better feeling continues to be gradually developing. With the low values ruling, an early spring and favorable weather, all lines of trade give promise of considerable activity. In sympathy with these conditions the grain markets are becoming more buoyant. Values show a gradual hardening tendency, and more tenaciously maintain any advance. The wants of buyers are on the increase, and will likely continue so as trade improves. We do not anticipate that improved conditions will warrant any large advance in values to be maintained, but will afford better opportunities than has existed for some time past to market considerable grain that is being held for higher prices. WHEAT.—Continues in good request with offerings small and the demand active at quotations. No. 2 Red at 55@55½ cents, No. 3 Red at 54 cents. CORN.—The market is ruling firm and higher in sympathy with the advance in the West, and the very few receipts are selling quite readily. No. 2 White at 45 cents, No. 3 White at 44 cents, No. 2 Mixed at 43½@44 cents, No. 3 Mixed at 43 cents. EAR CORN.—The arrivals have been fairly liberal, while the demand has not ruled very urgent, but at the close the inquiry was more active in sympathy with the advance in shelled corn. Choice Yellow at 44@44½ cents, mixed at 42½@43 cents, white at 42@42½ cents. OATS.—Are ruling steady and firm with the receipts small and demand fair. No. 2 White at 34@34½ cents, No. 3 White at 33@33½ cents, No. 2 Mixed at 31½@32 cents, No. 3 Mixed at 30½ cents, and all offerings were taken. RYE.—Is nominal, the receipts and demand are quite light. No. 2 at 56@57 cents, Choice 58 cents. HAY.—Receipts for the week 2,168 tons, shipments 1,628 tons. For the corresponding week last year the receipts were 1,781 tons, shipments 640 tons. The arrivals the past week were smaller, being more or less curtailed by bad weather, and the demand has been sufficient to readily absorb the offerings at pretty full prices. Toward the close under more favorable weather conditions a larger movement was anticipated and the demand did not rule quite so active. Choice Timothy \$10.50@10.75, No. 1 at \$10.00@10.25, No. 2 at \$9.00@9.50, No. 3 grass and Timothy mixed at \$7.50@8.50, No. 1 Clover Mixed at \$9.50, No. 2 Clover Mixed at \$8.75@9.25, No. 1 Clover at \$9.25@9.50, No. 2 Clover at \$8.50@9.10. STRAW.—Good bright wheat at \$4.50@5.00. MILL FEED.—Easier for middlings at \$14.00@15.00, with the inquiry light. Bran is steady at \$14.50@15.00.

RICE PRODUCTION IN THE UNITED STATES.

The department of agriculture has received from Messrs. Dan Talmage's Sons a statement on rice production in the United States and in the American colonies previous to their attainment of independence, together with the data on the exportation of rice for certain years during colonial times. The introduction of rice culture in South Carolina is given according to two authorities, the date of this important event in Southern agriculture having been 1688, according to Drayton's View of South Carolina, or 1694, according to Ramsey's work of the same title. It is stated on the authority of Carroll's Historical Collection that in 1707 seventeen ships left South Carolina with cargoes of rice, and the exports during the years from 1730 to 1739 included 37,353,792 pounds to Portugal, 1,599,360 to Spain, 429,184 to Gibraltar, 4,256,000 to France, 13,440,000 to Great Britain and Ireland, 163,572,864 to Holland, Hamburg and Bremen, 3,136,000 to Sweden. In 1770 the exports to Great Britain amounted to 37,036,500 pounds, South of Europe 18,148,000 and West Indies 20,016,500 pounds. The rice produced in 1720-21 in this country was 50,274,566 pounds; in 1749-50, 24,418,194 pounds; 1769-70, 75,264,500; 1799-1800, 67,233,600; 1819-20, 53,292,000; 1839-40, 84,145,800; 1859-60, 117,885,000; 1863-64, 1,580,790; 1869-70, 53,970,880; 1879-80, 85,596,800; 1889-90, 131,722,000; 1892-93, 237,546,900, and 122,865,160 pounds in 1893-94.

Mrs. M. E. Culver of Lafayette, Ind., writes: "Long live the AMERICAN ELEVATOR AND GRAIN TRADE."

LATE PATENTS

Issued on February 12, 1895.

DRIVE CHAIN.—Thomas B. Jeffery, Ravenswood, Ill. No. 533,957. Serial No. 302,033. Filed March 5, 1889.

GAS ENGINE.—Frank A. Rider and Simon Vivian, Ft. Wayne, Ind. No. 533,922. Serial No. 507,583. Filed April 14, 1894.

ELEVATOR CUP ATTACHMENT.—William H. Emerson, Chatham, Canada, assignor of one-half to Manson Campbell, same place. No. 533,875. Serial No. 467,513. Filed March 24, 1893.

DRIER FOR BREWERS' GRAINS, ETC.—Percy B. Taylor, Newark, N. J., assignor of one-half to Cyrus C. Currier, same place. No. 533,929. Serial No. 501,001. Filed Feb. 21, 1894.

DUST COLLECTOR.—J. H. Holland, Indianapolis, Ind. No. 534,068. Serial No. 527,419. Filed Oct. 30, 1894.

ELEVATING AND CONVEYING MECHANISM.—Jas. M. Dodge, Philadelphia, Pa., assignor to the Link Belt Engineering Company, same place. No. 534,097. Serial No. 486,860. Filed Sept. 25, 1893.

COMPENSATING GEARING FOR CONVEYORS.—Jas. M. Dodge, Philadelphia, Pa., assignor to the Link Belt Engineering Company, same place. No. 534,098. Serial No. 527,640. Filed Nov. 1, 1894.

GAS ENGINE.—John W. Lambert, Union City, Ohio. No. 534,163. Serial No. 500,301. Filed Feb. 16, 1894.

BALING PRESS.—Henry Deitz, Denver, Colo. No. 534,205. Serial No. 500,930. Filed Feb. 20, 1894.

Issued on February 19, 1895.

BALING PRESS.—Plin C. Southwick, Sandwich, Ill. No. 534,291. Serial No. 514,261. Filed June 11, 1894.

BALING PRESS.—Plin C. Southwick, Sandwich, Ill. No. 534,292. Serial No. 526,929. Filed Oct. 25, 1893.

GAS ENGINE.—Geo. J. Weber, Kansas City, Mo. No. 534,354. Serial No. 496,940. Filed Jan. 15, 1894.

Issued on February 26, 1895.

ENDLESS CONVEYOR.—Ambrose J. B. Berger, Hingham, Mass., assignor to the Steel Cable Engineering Company of Maine. No. 534,808. Serial No. 490,976. Filed Nov. 15, 1893.

Issued on March 5, 1895.

DUST COLLECTOR AND SEPARATOR.—Moses F. Gale and Howard E. Meadon, Brooklyn, N. Y. No. 535,099. Serial No. 531,175. Filed Dec. 8, 1894.

MARLINSPIKE.—Adolph Helgenson, Portland, Ore. No. 535,103. Serial No. 534,561. Filed Jan. 11, 1895.

GRAIN INSPECTOR NOT RESPONSIBLE FOR FORGED CERTIFICATES.

The jury in the case of the W. R. Mumford Commission Company of Chicago against Joseph M. O'Shea, state grain inspector of Missouri, returned a verdict in favor of O'Shea February 26. The Chicago house sued for \$2,030, advanced to the Richland Grain Company of Kansas City on an alleged shipment of wheat, which was not delivered. The money was paid on the strength of certificates of inspection which accompanied the bills of lading. The defense was that the certificates were forgeries.

Something over a year ago a truly rural specimen turned up on the floor of the Board of Trade at Kansas City. He gave his name as J. D. Richland, and admitted, on the quiet, to some of the older speculators that he knew but little about the game, but he had plenty of money, and was willing to take a whirl at it if only for the experience. So verdant was Mr. Richland that several cautious old gentlemen advised him to be very careful in his transactions; there were so many sharpers and robbers around, they said, looking for just such marks as Mr. Richland. For all of this advice Mr. Richland was very thankful, indeed. He assured his kind friends that he would be very, very careful, and keep his eyes open all the time.

Mr. Richland opened two offices under the firm name of the J. D. Richland Grain Company and went on in his quiet way making friends. He made a few small deals to establish the fact that he was doing something and branched out by degrees. Finally he bought a lot of grain out in Kansas and sent it on to Memphis and Chicago. Everything was regular, the grain arrived on time and Mr. Richland got his money. Then he swiftly accomplished the coup that paralyzed every commission man in the country.

Richland, to carry on his operations, had the aid of a printing-office and of a man who understood the manufacture of rubber stamps. He had also the aid of some confederates and a wonderfully versatile pen-

With this paraphernalia at hand, combined with a thorough knowledge of the grain commission business and the standing he had acquired in Kansas City, he went to work with the skill and address of Jim the Penman.

Taking a number of stations along the various railway lines in Kansas as his base of operations, he set about securing the signatures of the agents at each of these points. This was easily accomplished by writing the agent for information, the signature coming with the reply. A number of blank drafts on various Kansas City banks and a number of blank certificates from the state grain inspector's office were printed in Richland's printing-office and the schemer was ready.

He filled out a waybill certifying that five cars of wheat, for instance, were shipped on such and such a date from such and such a station by the J. D. Richland Grain Company of Kansas City, and to this waybill he forged the signature of the railroad agent at the station the grain was supposed to have been sent from. Then he forged a certificate from the state grain inspector's office at Kansas City, certifying that such and such a car or number of cars of such and such a road had been inspected for the J. D. Richland Grain Company and contained such and such a grade of wheat. He wound up by forging a draft, payable to the J. D. Richland Grain Company, for an amount up to 80 per cent. of the value of the fictitious consignment. Repeating this mode of operation on a number of stations—how many nobody knows—he finally had a big stack of forged waybills, drafts and certificates, worth, it is thought, \$50,000 or over, if every man or firm picked out for a "sucker" bit.

All that remained was to address envelopes to commission firms in St. Louis, Chicago, Memphis, Omaha and other places. In each of the envelopes he placed a trio of forged documents and a nice letter asking that the consignment be sold to the credit of the J. D. Richland Grain Company. He mailed the letters so that the replies would all come in about the same day—those to the farther points going first.

The commission firms receiving the forged bill of lading, certificate of inspection and draft had no suspicions. Everything looked square and regular. The bills of lading on the face of them were guarantees from railroad companies to deliver to the consignee a certain number of cars of grain. Grain travels slowly on freight trains and might be in the next day or the next week. It is customary to honor drafts on bills of lading and the drafts were honored. In three days Mr. Richland gathered his harvest of gold, closed his offices and disappeared. The grain he said he shipped never reached its destination, there were inquiries, investigation and realization that the verdant Mr. Richland was smarter than most men. He was away with the money and has never been apprehended.

VALUABLE BOOKS FOR GRAIN DEALERS.

The following standard works will be sent, postage paid, on receipt of prices given:

ROBINSON'S TELEGRAPH CIPHER.—The publishers have recently revised this excellent work, and we are now prepared to supply the trade. Cloth binding, \$1.50; leather, \$2.00.

WEIGH BOOKS.—Containing 125 perforated leaves with four weigh tickets and four stubs to each leaf, well printed upon good paper. The books are well bound. Copies will be mailed to any address for \$1.00.

CLARK'S VEST-POCKET GRAIN TABLES.—A very useful and handy little book for grain buyers; to be used in reducing to bushels any quantity of grain or seeds up to 100,000 lbs. Size 2½ by 3½ in., 16 pages. . . . 50

POUNDS TO BUSHELS.—These tables which show the number of bushels in any quantity from 20,000 to 70,000 pounds were compiled for the Chicago Grain Inspection Department. They are well printed on good paper and conveniently arranged for quickly finding the number of bushels in a carload. Each book contains ten leaves and each leaf is indexed at margin and printed on one side only. Each book is neatly bound in cloth. They will save clerks much labor and prevent errors in reduction. Price for "OATS," \$1.00; "BARLEY," \$1.00; "CORN AND RYE," \$1.00. The set. . . . \$2.50

JENNINGS' TELEGRAPH CIPHER AND DIRECTORY TO NEW ENGLAND TRADE.—A new guide to carload buyers of grain throughout New England. A list of those engaged in the grain, feed and flour trade. Western grain shippers and millers wishing to do business in this territory will find this directory invaluable. The telegraph cipher has met with favor and is highly recommended by users. In fact the code part of the book is considered by many shippers superior to any other in use. It is modern and practical, a great money saver and will prevent mistakes. Nicely bound in leather. . . . \$3.00

ADAMS' CABLE CODEX.—This code is compiled especially for sending cablegrams and is used extensively in this country and abroad. The seventh edition, which is about to go to press, will contain 160 pages of cipher words, conveniently arranged. The code contains sentences covering and referring to buying and selling, condition of market, sterling money,

United States money, business, financial matters, letters of credit, drafts, standing of firms and many sentences used by travelers. The cost of the code is a mere nothing compared with the saving which can be made on one message. Price, postpaid. . . . \$0.55

DAVIS' GRAIN TABLES.—These tables give the value of any number of bushels of produce weighing 60 pounds to the bushel from 25 cents to \$1.25 per bushel, and the value of any produce weighing 32, 48 and 56 pounds to the bushel at 15 cents to \$1.50. The book also contains Davis' Dockage Table, which gives the amount to dock any load of wheat up to 600 bushels at 1½ to 5 pounds' dockage. The book contains 219 pages of tables, printed on good paper, with large type, and well bound in cloth. The book is a new publication, and the arrangement of the tables is much more convenient than in some of the old publications. Price. . . . \$1.25

CLARK'S GRAIN TABLES.—This work is published in several different forms, for use in different lines of business. In these tables pounds are reduced to bushels, so that a buyer can quickly determine the correct number of bushels in a load without doing any figuring. Their use effects a saving every day of more than time enough to pay for them. The edition intended principally for reducing team scale weights to bushels contains nine tables, and is bound in paper. Price 50 cents. This will be found invaluable to country buyers. A new edition, intended for shippers and commission merchants, reduces any quantity up to 64,000 pounds to bushels. It contains 16 tables, and is neatly bound in cloth. Price. . . . \$1.50

ROPPE'S COMMERCIAL CALCULATOR.—A small manual in compact form which contains a new system of useful and convenient commercial tables. Also a "Practical Arithmetic for Practical Purposes" in which is embodied the shortest and simplest rules and methods known. It includes in its contents a table giving the value of cattle, hogs, flour, etc., for any amount ranging from 3 to 20,000 pounds, and in price from \$2.50 to \$6.75 per 100 pounds. It contains a table which shows the equivalent of English market quotations from 1 to 100 shillings in U. S. money. It also shows the freight on grain per bushel from 1 to 50 cents per 100 pounds. The grain tables show the number of bushels and odd pounds in any quantity of any kind of grain from 10 pounds to 100,000 pounds. The hay, straw and coal tables shows the value in tons of any amount ranging from 10 to 3,000 pounds at prices from 25 cents to \$18 per ton. The interest tables are very complete and give the interest for any amount for any time and for any rate per cent. ranging from 6 per cent. to 10. The millers' and farmers' exchange table gives the number of pounds of flour to be received from wheat ranging from 5 to 3,000 pounds and from 25 to 40 pounds to the bushel. Tables of money weights and measures are also included, and also the metric system. The book contains much other useful information. Price. . . . 50

For any of the above, address

MITCHELL BROS. Co., 184 and 186 Dearborn street, Chicago, Ill.

LOCATIONS FOR FACTORIES.

The name of the Chicago, Milwaukee & St. Paul Railway has long been identified with practical measures for the general upbuilding of its territory and the promotion of its commerce, hence manufacturers have an assurance that they will find themselves at home on the company's lines.

The Chicago, Milwaukee & St. Paul Railway Company owns and operates 6,155 miles (9,900 kilometers) of railway, exclusive of second track, connecting track or sidings. The eight states traversed by the lines of the company, Illinois, Wisconsin, Northern Michigan, Iowa, Missouri, Minnesota, South Dakota and North Dakota, possess, in addition to the advantages of raw material and proximity to markets, that which is the prime factor in the industrial success of a territory—a people who form one live and thriving community of business men, in whose midst it is safe and profitable to settle. Many towns on the line are prepared to treat very favorably with manufacturers who would locate in their vicinity.

Mines of coal, iron, copper, lead and zinc, forests of soft and hard wood, quarries, clays of all kinds, tanbark, flax and other raw materials exist in this territory in addition to the vast agricultural resources.

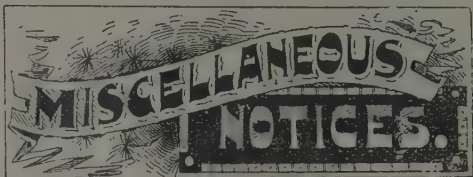
A number of new factories have been induced to locate—largely through the instrumentality of this company—at towns on its lines. The central position of the states traversed by the Chicago, Milwaukee & St. Paul Railway makes it possible to command all the markets of the United States. The trend of manufacturing is westward. Nothing should be permitted to delay enterprising manufacturers from investigating. Confidential inquiries are treated as such. The information furnished a particular industry is reliable. Address

LUIS JACKSON,
Industrial Commissioner, C. M. & St. P. R'y,
425 Old Colony Building, Chicago, Ill.

A bill has been recommended by the Minnesota Senate committee providing for seed grain loans to farmers whose crops have been destroyed.

A Piano at a Nominal Price.

Chicago's largest music house, Lyon & Healy moved into a magnificent new building some little time ago. They have a number of slightly used and second-hand pianos returned from World's Fair renting, etc., etc., which they have determined to sacrifice rather than to continue to make room for. These instruments comprise Square pianos at \$40, \$65, \$90, \$100, and \$125. Upright pianos at \$125, \$140, \$150, \$165, \$190, \$200, \$225, \$240, and upward. Grand pianos at \$200, \$250, \$300 and upward. Nearly all originally sold for from two to four times their present price. Almost all prominent makes are represented, including among numerous others: Chickering, Knabe, Steinway, Weber, Decker, Steck, Fischer, etc. This is an opportunity that will not occur again, as Lyon & Healy have not moved for twenty years. Immediate attention is therefore necessary. A good plan would be to order a piano, leaving the selection to Lyon & Healy. However, they will send a list and full particulars upon application. Any piano not proving satisfactory may be returned at their expense. Address at their new salesrooms, corner Wabash Avenue and Adams St., Chicago. Distance is no obstacle in taking advantage of this remarkable chance to obtain a piano, for in proportion to the saving to be made the freight charges are insignificant. If you do not already know them by reputation any banker will assure you of Lyon & Healy's entire responsibility and record of over a third of a century for honorable dealing. Write to-day so as to avoid disappointment.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

FLOATING ELEVATOR WANTED.

I want to purchase a floating grain elevator complete. Address
GRAIN, Box 1796, New Orleans, La.

POSITION AS MANAGER WANTED.

Wanted—Situation to manage grain elevator or roller cornmeal plant. Understand the business. Address

K. W. E., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

SITUATION AS ENGINEER WANTED.

Wanted—Situation by an engineer competent to take charge of a good steam plant and get best results. Age 35, married; am sober and industrious. Correspondence solicited. Address

G. BOZARTH, Cedar Falls, Iowa.

WILL BUY OR LEASE ELEVATOR.

I want to buy or lease a good grain elevator in Illinois. Or I would exchange one-half interest in a good new United States patent. What have you to offer? Write at once, giving full particulars. Address

FRANK L. REAM, Toluca, Ill.

RUDY'S PILE SUPPOSITORY

Is guaranteed to cure Piles and Constipation, or money refunded. 50 cents per box. Send two stamps for circular and free sample to MARTIN RUDY, Registered Pharmacist, Lancaster, Pa. No POSTALS ANSWERED. For sale by all first-class druggists everywhere. Peter Van Schaack & Sons, Robert Stevenson & Co., Morrison, Plummer & Co., and Lord, Owen & Co., wholesale agents, Chicago, Ill

DAVIS' GRAIN TABLES.

The value of wheat or any grain at 60 pounds to the bushel, for any amount less than 100 bushels is shown without addition or multiplication, and for any amount over 100 and under 1,000 bushels, with but a single addition; at any price from 25 cents to \$1.25 per bushel. The value of bushels and pounds of other grain also is shown at 56, 48 and 32 pounds to the bushel at any price from 15 cents to \$1.50 per bushel. Price, postpaid, \$1.25. Address

E. D. DAVIS, 610 Nicollet Ave., Minneapolis, Minn.

ELEVATOR WITH CRIBS WANTED.

I want to rent or lease a steam or horse power grain elevator with cribs in a good corn and oat section in Central Illinois. Prefer location on either Illinois Central, Chicago & Alton or Burlington Railroad. Address, giving full particulars,

N. D., care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.



[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

ELEVATOR, COAL AND LUMBER YARD.

Elevator, coal and lumber yard for sale. With Fairbanks' Wagon and Hopper Scales. Two dumps, one for white and one for yellow corn. Private side track. Gasoline engine, 16-horse power. Good country. For further information address

JACOB BALTHASER, Amanda, Ohio.

WILL BE SOLD TO CLOSE ESTATE.

The elevator at Henry, Ill., formerly owned and operated by G. C. Griswold & Co., is for sale to close the estate of G. C. Griswold, deceased. The elevator has a capacity of 150,000 bushels, the cribs and corn dump 30,000 bushels of ear corn. Elevator and cribs in first-class condition. Also three steam canal boats and five canal barges. Address

A. K. KNAPP, Minooka, Ill.

JENNINGS' CIPHER CODE.

Jennings' N. E. Telegraph Cipher contains many novel ideas, and is complete with instructions as to buying, selling, ordering, market advices, offers, bids, finance, bill lading, instructions, freight inquiries and advices, shipping inquiries and instructions, guaranteeing, etc., such as no other cipher contains. It is now in use with the principal shippers and dealers in flour, grain and feed. It is invaluable to shippers of corn and oats. For general shipping business it is superior to any other telegraph code. Send for list of users, which is the best argument in its favor. It is also a directory of the New England grain dealers. Sent postpaid on receipt of price, \$3. Address

HENRY JENNINGS, 613 Chamber of Commerce, Boston, Mass.

FOR SALE.

THREE GRAIN ELEVATORS

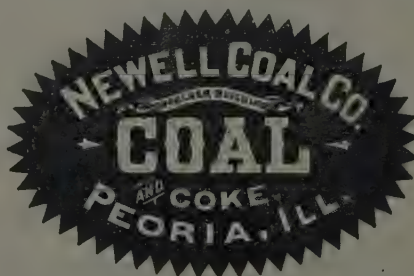
... In Western Iowa on C. & N. W. R. R.

MARTIN D. STEVERS & CO.

COMMISSION MERCHANTS,

218 La Salle St., - CHICAGO.

ORDER YOUR COAL FROM



CHICAGO OFFICE, 355 Dearborn Street.

CIGARS

FOR GRAIN MEN.

Who buy cigars at "two for a quarter" when we will sell you a full steamed Havana imported Havanna filter at \$5.00 per hundred, delivered 2 sample box or 10 for \$1.00—far better than the average "two for a quarter." Address

THE HAVANA CIGAR CO., Tampa, Fla.

BUSINESS LAW

CONDENSED, PLAIN, PRACTICAL—UP TO DATE: A MONTHLY PAPER

FOR THE BUSINESS PUBLIC AND FOR EVERYDAY USE.

Every Person in Any Business, Preparing for Business, or Having Property, Needs It.

IT WILL SAVE MONEY AND HELP TO SUCCESS.

IT COVERS THE WHOLE FIELD: Bargains and Sales, Contracts, Credits, Insurance, Master and Servant, Partnerships, Patents, Transportation, etc., etc.

Terms: \$1.00 a year; single copies 10 cents; or, on trial,

6 MONTHS FOR 25 CTS.

ADDRESS: BUSINESS LAW, 1021 Opera House Building, CHICAGO, ILL.

COMMISSION CARDS.

W. F. JOHNSON.

F. J. SCHUYLER.

W. F. JOHNSON & CO.,

Grain, Seed and Provision

COMMISSION MERCHANTS

Room 59 Board of Trade, CHICAGO.

Rooms 406-408 Corn Exchange, MINNEAPOLIS.

Room 317 Chamber of Commerce, ST. LOUIS.

Room 23 Chamber of Commerce, MILWAUKEE.

Address all Correspondence to and make all Drafts on Chicago.

H. B. SHANKS.

Established 1873.

E. H. PHILLIPS.

Shanks, Phillips & Co.,

COMMISSION MERCHANTS,

HAY, CORN, OATS, BRAN, CHOPS, FLOUR AND CORN MEAL.

306 Front St., Memphis, Tenn.

Refer to Union and Planters' Bank. Cash advances on B. of L.

E. L. ROGERS & CO., ESTABLISHED 1863.

COMMISSION

MERCHANTS,

GRAIN, Flour, Seed, Hay and Straw.

135 S. Second St., (Chamber of Commerce) PHILADELPHIA, PA.

Liberal advances made on consignments. Market reports furnished gratuitously on application. Correspondence solicited.

References: { Corn Exchange National Bank.
Manufacturers National Bank.
Merchants National Bank.

D. G. Stewart,

GRAIN AND COMMISSION.

Proprietor IRON CITY GRAIN ELEVATORS.

Capacity, 300,000 Bushels.

LIBERAL ADVANCES ON ALL CONSIGNMENTS.

CORRESPONDENCE SOLICITED.

OFFICE, 1019 Liberty Street, - PITTSBURGH, PA.

ESTABLISHED 1871.

LEMAN BARTLETT.

O. Z. BARTLETT.

L. Bartlett & Son,

GRAIN AND PRODUCE

COMMISSION MERCHANTS.

BARLEY A SPECIALTY.

Room 23 Chamber of Commerce Bldg.
Milwaukee, Wis

Careful attention given to orders from Brewers, Malsters and Millers.

COMMISSION CARDS.

J. J. BLACKMAN.

G. W. GARDINER.

J. J. Blackman & Co.,

COMMISSION MERCHANTS,

WHEAT, CORN, OATS, BRAN, MIDDINGS, SCREENINGS, HAY,
SEEDS, BEANS, PEAS AND CORN GOODS.

95 Broad Street, Rooms 604 and 605, - NEW YORK.

Muhle & Herz,

AGENTS

HAMBURG, GERMANY.

Corn, Grain, Flour,

Provisions, Mill Feed.

Correspondence Solicited from Exporters and Shippers.

BUY YOUR GRAIN

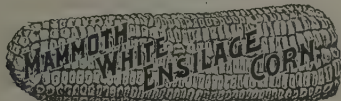
FROM

SUFFERN, HUNT & CO.,

ROOMS 10 AND 11 FENTON BLOCK,

DECATUR, - ILLINOIS.

We make a specialty of White and Yellow Corn for milling purposes. We also handle mixed Corn, white and mixed Oats, Mill Feed and Hay. Can ship any line. We want your business Send for prices.



Raised under our supervision, very choice. Write for testimonials from Canadian dealers, prices and samples.

E. R. ULRICH & SON.

Also Choice Milling White or Yellow Corn, White Oats, Red Winter Wheat. Elevators along Wabash Ry., J. S. E. Ry., C. & A. Ry., St. L., C. & St. P. Ry., Central Illinois.
Office, Sixth Floor, Illinois National Bank, SPRINGFIELD, ILL.
We use Robinson's or Jennings' Cipher.

COMMISSION CARDS.

COLLINS & Co.,

STRICTLY COMMISSION

Grain, Hay and Mill Feed.

CINCINNATI, OHIO.



F. H. PEAVEY & CO.,

Minneapolis,

GRAIN RECEIVERS.

Consignments Solicited.

MILLING WHEAT A SPECIALTY.

GEO. N. REINHARDT & CO.,

Melrose Station, New York City.



We sell on Commission and buy direct,

HAY, GRAIN AND FEED.

Storage capacity, 8,000 bales, 30,000 bushels.
Let us know what you have to offer.

COMMISSION CARDS.

W. T. Carrington.

ESTABLISHED 1854.

W. E. Brighan.

W. T. CARRINGTON & CO.,

SUCCESSORS TO THE BUSINESS OF

CARRINGTON & CASEY and CARRINGTON & CO.,

GRAIN AND SEEDS,

Milling Wheat a Specialty.
Write us for offers.

Toledo, Ohio.

J. N. WOOLISCROFT & CO.,

Receivers and Shippers of

GRAIN and HAY,

ROOMS 10 and 11 GAZETTE BLDG.,

Cincinnati, Ohio.

E. P. MUELLER,

Shipper of Wet Feed,

From Chicago, Milwaukee and La Crosse.

Shipments of grain and hay taken in exchange for feed at highest Chicago market prices. No charge for commission. Special inducements made on Wet Grain for silo purposes during May and June. Write for circulars and prices.

860 Calumet Bldg., 189 La Salle St., CHICAGO.

Brewers' Wet and Dried Grains, Screenings, Barley Sprouts,
Hominy and Mill Feed.

Robert McKnight & Sons,

COMMISSION MERCHANTS,

AND DEALERS IN

GRAIN, FEED AND HAY,

2106 and 2108 Market Street, - PHILADELPHIA

REFERENCES: Merchants' and Third National Banks,
PHILADELPHIA.

At 1/4 Price

Gold and Silver Watches, Bicycles,
Tricycles, Guns and Pistols, Cars,
Buggies, Wagons, Carriages, Saws,
Sleighs, Harness, Cart Tops, Skids,Sewing Machines, Accordions, Organs, Pianos, Cider Mills,
Cash Drawers, Feed Mills, Stoves, Kettles, Bone Mills,
Letter Presses, Jack Screws, Trucks, Anvils, Hay Cutters,
Press Mangles, Copy Books, Vases, Drills, Road Plows,
Lawn Mowers, Coffee Mills, Lathes, Sanders, Dump Carts,
Corn Shellers, Hand Carts, Forges, Scrapers, Wire Fences,
Fanning Mills, Weighers, Engines, Saws, Steel Sinks,
Grain Pumps, Crow Bars, Bolters, Tools, Bit Braces,
Hay, Stock, Elevator, Rail Road, Platform and Counter SCALES.
Send for free Catalogue and see how to save money.
151 So. Jefferson St., CHICAGO SCALE CO., Chicago, Ill.SEED
FLAX

No crop has paid the North-western farmer a better average return for ten years than Flaxseed. On account of drouth, about 75 per cent. of the past crop marketed after Oct 15 was green and immature. Plant good seed for good returns. There is none better than ours. Half rates on leading railway lines.

St. Paul Linseed Oil Works

ST. PAUL, MINN.,

HEADQUARTERS FOR
GROUND LINSEED OIL CAKE.

The Best and Cheapest Stock Food.

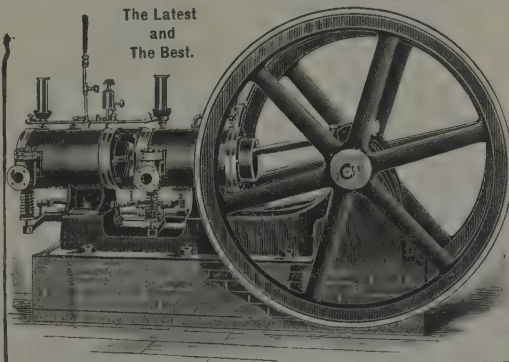
American Elevator and Grain Trade.

—PUBLISHED BY—

MITCHELL BROS. CO., CHICAGO

\$1.00 PER ANNUM.

The Hicks Gas and Gasoline Engine.

The Latest
and
The Best.The Long Sought for
Found at Last.

An impulse with every turn of the crank. Less gas or gasoline. Steadier motion. Easily started. Less space. Self adjusting in all its bearings. Price within the reach of all. Adapted to all uses, and as much better than the ordinary gas engine now on the market, as the Corliss steam engine is better than the common slide valve of twenty years ago. Two to one hundred horse power. Both vertical and horizontal.

Write for catalogue and prices.

The Hicks Gas Engine Co.
Cleveland, Ohio.BARNARD & LEAS MANUFACTURING CO.,
MOLINE, ILLINOIS.

Sole Manufacturers of Barnard's Grain Cleaning Machinery.

See these machines at work before purchasing.

The Barnard Grain Cleaning Machinery is built in a greater number of sizes, in a greater number of styles, and for a greater variety of uses in the mill and elevator than any other.

105 Barnard Cleaners were sold during the month of June for mills to be built and remodeled by us, for Elevators and Warehouses and incidental sales.

SEND FOR SPECIAL CATALOGUE OF ELEVATOR MACHINERY.

The Incline Elevator and Dump.

Patented April 3, 1894.

It is **THE NEW WAY** of elevating ear corn, shelled grain or minerals into car or storage bin.

Its cost is so small that it is practical for farm use.

Its pulley blocks are roller bushed and steel, reducing friction to a minimum.

With it ear corn can be cribbed with less expense than with a scoop, if cost of storage is considered.

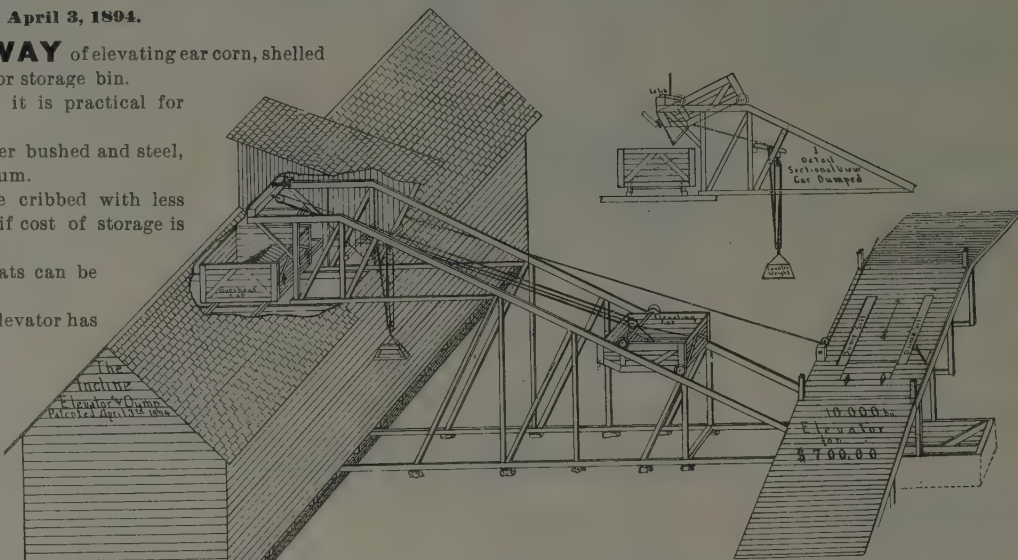
With it 3,000 bushels of oats can be elevated in one hour.

With it a grain dealer's elevator has the following advantages:

Every team elevates its own load, thereby the power for elevating is obtained without cost.

A whole load is elevated at a time and dumped at the top, making it practical to use an overhead car by which at the same cost you obtain more shipping bin capacity alone than all the storage and snipping bin capacity of a belt elevator.

Cleaning machinery can be adjusted with unusual convenience.



\$2,000 will complete a 64,000-bushel Elevator, having 21 shipping bins holding 800 bushels each.

It is the least possible investment and expense for the best results.

Manufactured by **H. KURTZ & SON, Mansfield, Ill.**

A NEW plan of chute, leading from shipping bin to railroad car is used, through which either ear corn or shelled grain will pass equally well. The overhead car having a capacity of 100 bushels can be completely filled without moving.

A safety ratchet holds every inch-elevated and prevents a crash should a break occur; and the teamster can unfasten rope without getting out of his wagon.

Our new Ventilated and Combination Grain Bin was patented Jan. 15, 1895.

Going to Buy a Scale?

If so, read a few opinions of Prominent Elevator People on the Merits of the Demuth Check Beam.

C. A. PILLSBURY, Pres.

G. W. PORTER, Treas. and Mgr.

K. R. GUTHRIE, Secy.

GENERAL GRAIN DEALERS, Elevators on Minneapolis, St. Paul and Sault St. Marie Ry. MINNEAPOLIS, MINN., May 25, 1893.

DEAR SIR:—Replying to yours of the 22d, would say that we have the Check Beams on twelve (12) scales in our Atlantic "A" elevator, and like them very much. We find them a valuable check on the weighman, and good for reference to check up with. Yours truly, K. R. GUTHRIE, Secy.

NEW YORK CENTRAL LIGHTERAGE CO. NEW YORK CENTRAL ELEVATORS. Gibson L. Douglass, Mgr. WEST SHORE ELEVATOR. 1 and 3 Beaver Street. New York, May 26, 1893.

DEAR SIR:—We are using nineteen "Check Beams" on the Fairbanks scales at N. Y. C. & H. R. R. elevator, and sixteen at the West Shore R. R. elevator. Have discovered a number of errors through their use during the past two years, and consider them a good thing. Yours truly, G. W. PHELON, Supt.

ARMOUR ELEVATOR CO., Rooms 1111 and 1112, 205 La Salle Street. Elevators on C. M. & St. P. Ry., and C. B. & Q. Ry., Chicago. Total Capacity 9,000,000 Bushels. J. A. DEMUTH, 40 Elm Street, Oberlin, Ohio. Chicago, May 26, 1893.

DEAR SIR:—Yours of the 22d inst. in reference to Check Beams in use on our Fairbanks scales. Would say that we have in use 35 of the Check Beams on scales at our elevators, and consider them invaluable for accurate weighing. Yours very truly, ARMOUR ELEVATOR CO.

PADDOCK, HODGE & COMPANY, GRAIN MERCHANTS. 29 and 30 Produce Exchange. J. A. DEMUTH & CO., Oberlin, O. TOLEDO, OHIO, June 28, 1893.

DEAR SIR:—In reply to your favor of a recent date: We have had our Fairbanks scales supplied with your double entry system since last November, and in errors detected and corrected, for and against us, it has more than paid for itself, to say nothing of the satisfaction of knowing that our weighman's entries are absolutely correct after they have been balanced up by your system. Dictated by J. H. Yours truly, JAMES HODGE, Secy. and Treas. Toledo Elevator Co.

Furnished only with Fairbanks Scales

DO YOU NEED

The Best Feed Grinder on Earth,



AT PRICES THAT
DEFY COMPETITION?

If so, write to

Chas. Kaestner & Co.

ENGINES, BOILERS,
PUMPS,
POWER MACHINERY,

CHICAGO, - ILL.

SEEDS

THE ALBERT DICKINSON CO.

Timothy, Clovers, Flax, Hungarian, Millets, Red Top, Blue Grass, Lawn Grass, Orchard Grass, Bird Seeds, Ensilage Corn, Pop Corn, Buckwheat, Field Peas, etc.

OFFICES, COR. CLARK & SIXTEENTH STS. CHICAGO, ILL.

Change Desks! PATENT IMPROVED.

—isn't it almost time?



We've desks that you'll be proud of—that ornament the most elaborate office—best material and splendid finish. We'll return the money if you want to send the desk back. You won't want to.

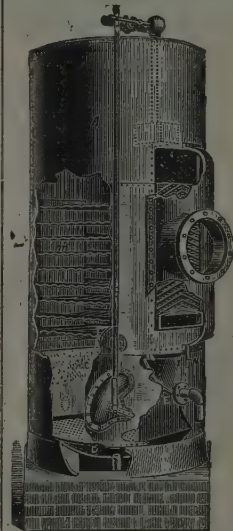
Roll Top Office Desk. solid oak, highly polished, two extension slides, patent lock and perfect flexible slide, roll top, antique finished, castered, high curtain, 4 ft. \$17.50; 4 ft. 6 in., \$18.50; 5 ft., \$20.50. Low curtain, 4 ft., \$15.75; 4 ft. 6 in., \$18.00; 5 ft., \$19.75.

Flat Top Desk. solid oak, highly polished, two extension slides, antique finish, castered, 4 ft., \$9.50; 4 ft. 6 in., \$10.00; 5 ft., \$10.50. Send for descriptive circular.

Montgomery Ward & Co.

111-118 Michigan Ave., Chicago.

TERMS. Cash with order, or will ship to our own address and draw through your bank with draft attached to Bill of Lading.



Lime Extracting Heater. Uses Exhaust Steam. Separates the Oil from the Steam and Water. It Regulates the Feed. The Pipes Never Pound. Prevents Scale in Steam Boilers. Removing all Impurities from the Water Before it Enters the Boiler.

THOROUGHLY TESTED.

Over 4,500

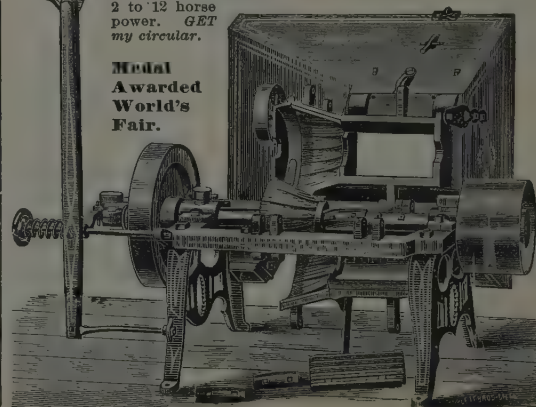
OF THEM IN DAILY USE.

Illustrated Catalogue Free.

The Stilwell-Bierce & Smith-Vaile Co. DAYTON, OHIO.

THE BEST ALL-AROUND FEED MILL.

The conical burrs give large capacity with moderate power. Ahead of rolls or burrs in speed and quality of work for grinding all kinds of grain into first-class feed. Will crush corn and cob, and grind oats, rye, barley, wheat, shelled corn, cotton seed, oil cake, etc. Has self-feeder for ear corn. The divided hopper makes it practical to grind oats, wheat, or other small grain, and crush ear corn at the same time; mixing the two in any proportion desired. Are sold with or without elevator attachment; and are made in three sizes, ranging from 2 to 12 horse power. **GET my circular.**



N. P. BOWSER

South Bend, Ind.



THE SMITH PNEUMATIC TRANSFER AND STEEL STORAGE SYSTEM.

*Now in Successful Operation
at Toledo, Ohio.*

This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

This system has nothing in common with other methods, but is entirely different and distinct, in construction, arrangement and operation, materials used, principles involved, and results obtained, from all others heretofore in use.

It is fully protected by 20 patents already issued, and others pending, in the United States and principal foreign countries.

It was on exhibition at the World's Columbian Exposition of 1893, and was awarded four highest medals and diplomas and received in addition thereto the highest indorsement of the principal officers of the Exposition as well as of the highest authorities in all industries to which it is applicable.

The title to all patents and other rights belonging to this system is vested in The Smith Pneumatic Transfer & Storage Co., and any infringement thereon will receive prompt attention.

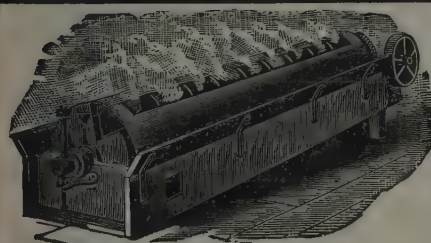
The policy of the Company in regard to the introduction of its system is to make such liberal and easy terms with all who desire to use it that there will be no cause for complaint.

Full particulars furnished on application in person or by letter to

The Smith Pneumatic Transfer & Storage Co.

1327 MANHATTAN BUILDING,

315 DEARBORN ST., CHICAGO.

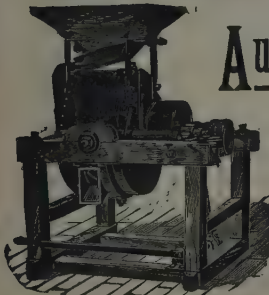


STEAM DRYER

For Cornmeal, Hominy, Buckwheat, Rice, and all kinds of Cereal Products; also Sand, Coal dust, etc.

Drying Cylinder made entirely of Iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

USED AND RECOMMENDED BY LARGEST AND BEST MILLS.



Automatic Adjustment Mill.

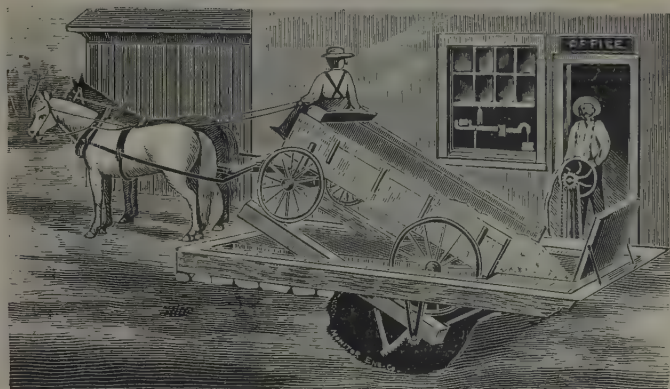
The adjustment is positive and automatic, utilizing every part of the grinding surfaces. Can be started or stopped at pleasure, without stopping the power. Is dressed without taking the shaft out of its boxes, or the belt off the pulley.

Comprises all Recent Improvements for Producing Goods at Lowest Cost.

SEND FOR CIRCULAR.

THE CUTLER CO., North Wilbraham, Mass.

Savage & Love's



PATENT WAGON DUMP

The only dump made that is always under the complete control of operator.

MESSRS. SAVAGE & LOVE, Rockford, Ill.

GENTLEMEN:—In reply to yours of the 17th, regarding Wagon Dumps, will say that they have proven entirely satisfactory in every respect. Yours truly, THE SOHNGREN & BROWN CO.

HAMILTON, OHIO, April 29, 1892.

MESSRS. SAVAGE & LOVE, Rockford, Ill.

GENTLEMEN:—We have used four of your Wagon Dumps and found them perfectly satisfactory. No danger splitting wagon boxes with these Dumps. Yours truly, J. B. POWELL.

PARKER, S. D., May 13, 1892.

Manufactured only by

THE SAVAGE & LOVE CO., Rockford, Ill.

FAIRBANKS, MORSE & CO., St. Paul, Minn.,

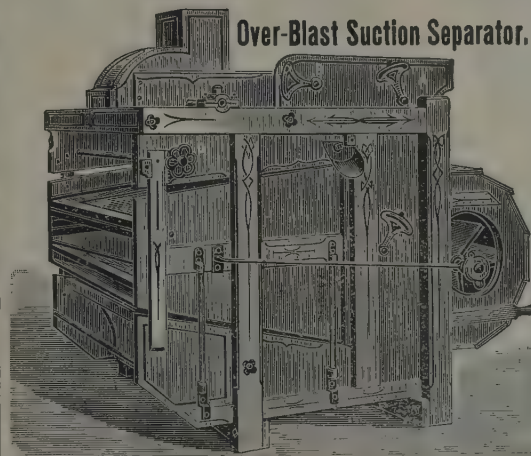
Northwestern Agents.

THE CELEBRATED A. P. DICKEY GIANT GRAIN CLEANERS.

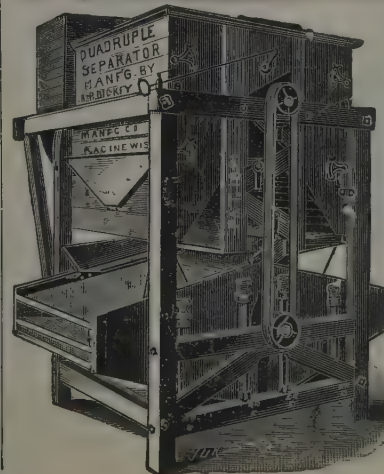
Over-Blast Suction Separator.

THE
STANDARD
IN THEIR
LINE.

*"Grain
Cleaned
to a
Standstill."*



Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over-Blast.



The Quadruple Suction Dustless Separator. Four separate suction, independent of each other with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnishes with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

For CIRCULARS and PRICES address

A. P. Dickey Mfg. Co.
RACINE, WIS.

ELEVATORS

SUPPLIED WITH RUBBER GOODS

DIRECT FROM MANUFACTURERS

THE GUTTA PERCHA & RUBBER MFG CO.

35 WARREN ST.
NEW YORK

SEND TO
NEAREST OFFICE
FOR CATALOGUE

170 LAKE ST.
CHICAGO

JAMES STEWART & CO.,

ENGINEERS AND CONTRACTORS FOR

Grain Elevators

RAILROAD WORK AND HEAVY STRUCTURES,

ST. LOUIS AND BUFFALO.

Construction Department—Work in 1894.

GRAIN ELEVATORS:

1,000,000-bushel Elevator, with two Marine Elevating Towers, for the Coatsworth Estate, Buffalo, N. Y.
150,000-bushel Storage Elevator for the Crescent Elevator Company, East St. Louis, Ill.

750,000-bushel Storage and Cleaning Elevator for the Ryan Commission Company, St. Louis, Mo.
100,000-bushel Elevator for the Indiana Distilling Company, Terre Haute, Ind.

RAILROAD BUILDINGS:

Central Passenger Station, including long train shed, for the New York Central & Hudson River R. R. Co., Syracuse, N. Y.
Twenty Stall Round House for the Cleveland, Cincinnati, Chicago & St. Louis R. R. Co., Mattoon, Ill.
Power and Car Houses with Smoke Stack for the Syracuse Street Railway Co., Syracuse, N. Y.

Passenger and Freight Station for the Louisville, Evansville & St. Louis Consolidated Railroad Co., East St. Louis, Ill.
Eight Stall Round House for the Baltimore & Ohio Southwestern R. R. Co., Cumminsville, Ohio.
Warehouse 110x500 feet for the Erie & Western Transportation Co., Erie, Pa.

RIVER AND HARBOR:

Terminal Dock 600x40 feet for the Erie & Western Transportation Co., Erie, Pa.
River Incinerator for the Illinois Central R. R. Co., Mississippi River, above New Orleans, La.

Dredging Slip 18 foot Channel, No. 1 Slip 150x400; No. 2 Slip 100x200, for the Erie & Western Transportation Co., Erie, Pa.
Stone Arched Bridge for the Cataract Construction Co., Niagara Falls, N. Y.

MISCELLANEOUS:

Office and Transformer Building for the Cataract Construction Co., Niagara Falls, N. Y.
Distillery, 8,000 bushels' capacity, and Warehouses for George L. Woolsey, Terre Haute, Ind.

50,000 Spindle Mill for the Pelzer Manufacturing Co., Pelzer, S. C.
Cattle Barns, Capacity 3,000 head, for the Indiana Distilling Co., Terre Haute, Ind.

Just Contracted for 25,000 Spindle Mill for the Dwight Mfg. Co., Alabama City, Ala.
Cattle Barns, 2,000 Head, for Indiana Distilling Co., Terre Haute, Ind.

SIMPSON & ROBINSON CO.

71-72 Commerce Building, CHICAGO.



Designers and Builders of

GRAIN ELEVATORS, MALT HOUSES

And all Kinds of Heavy Construction.

Patent System of Independent
Leg Rope Drive.Patent Double-Jointed
Distributing Spouts.Patent Automatic
Grain Belt Tripper.

SEELEY, SON & CO.,

Fremont, Neb.



Architects and Builders

OF ALL KINDS OF

GRAIN ELEVATORS.

FRANK KAUCHER.,

GRAIN ELEVATORS,

ARCHITECT AND CONTRACTOR OF

Patentee of the only MECHANICAL Mixing device
On the Market.

410 German American Bldg, ST JOSEPH, MO.

ELEVATOR HORSE POWERS.



*Cheapest,
Most Efficient
and Durable Power
For an Elevator.*

PERFECTLY GOVERNED.
A Steady Motion.

No Skilled Help Required to Operate.

For Catalogue, Address

MUSKEGON HEIGHTS, MICH.
Or E. H. PEASE MFG. CO.,
RACINE, WIS., Agents.

MORTON MFG. CO.,

Estimates furnished on ap-
plication for Transfer, Mix-
ing and Storage Elevators.We invite inspection of our designs and solicit
correspondence, respecting the construction of
Grain Elevators. We keep a full line of Mill
and Elevator Supplies at

313 THIRD STREET SOUTH, MINNEAPOLIS, MINN.

Branch Office, Great Northern Hotel, Chicago.

C. M. SECKNER, President.

J. H. BROWN, Sec'y and Treas.

THE

SECKNER

CONTRACTING CO.

Architects and Builders of

GRAIN ELEVATORS

And General Contractors,

79-81 Dearborn St.,
CHICAGO, ILL.

1234 and 1235 UNITY BLDG.

Telephone 5035 Main.



KANE'S
ELECTRO VAPOR ENGINES
BOATS
DON'T JUDGE OUR PRODUCTION BY
SIZE OF AD. SEND STAMPS FOR CATALOGUE.
THOS. KANE & CO. CHICAGO.

THE
COLUMBIA
KIMBALL BROS.
COUNCIL BLUFFS, IOWA
IMPROVED
STEEL PLYWOOD
SCALE
STEEL FACED
HOOPS
MANUFACTURED BY
KIMBALL BROS., Council Bluffs, Iowa.
Mention American Elevator and Grain Trade.

TROMANHAUSER BROS.,

ARCHITECTS, CONTRACTORS, AND BUILDERS OF

GRAIN ELEVATORS.



COUNTRY,
TRANSFER,
MIXING,
MARINE,
AND
TERMINAL
STORAGE
ELEVATOR
PLANTS.

Plans Submitted and Estimates Furnished.

315 New York Life Building, . . . MINNEAPOLIS, MINN.

WILL YOU BUILD?

Then build an elevator that will not fall down. Do not trust everything to country barn builders. Get working plans from professional designers of grain elevators, who have made a study of every strain an elevator is subjected to, of economy in building material, economy of space and of power. It will save you money. We have had years of experience.

J. T. NICHOLSON & SON,

Suite 144 Adams Express Building,
Correspondence Solicited. 185 Dearborn St., Chicago.

ESTABLISHED 1802.

WM. B. SCAIFE & SONS,

Offices, 119 First Avenue.

Manufacturers of

PITTSBURG, PA.



Corrugated Iron.

Sheet Iron and Copper Work.

Iron Buildings

of all Descriptions.

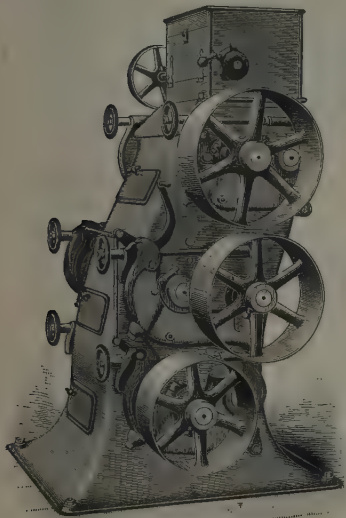
SEND ALL ORDERS DIRECT TO US.

NORDYKE & MARMON CO., Indianapolis, Ind.,

Flour, Corn and Elevator Machinery,

QUALITY TO SUIT THE MOST EXACTING.

PRICES TO SUIT THE TIMES.

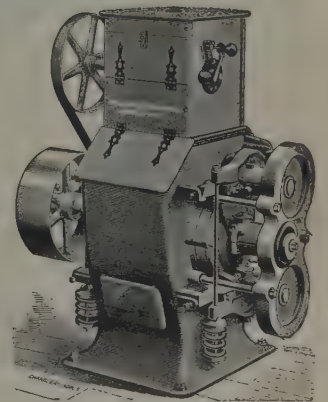


Three Pair High Six Roller Mill.

*Corn Shellers,
Grain Cleaners,
Flour and Bran Packers,
Flour Feeders and Mixers,
Portable Buhr Mills,
Hominy Mills,
Wheat Heaters,
Scales,
Shafting,
Pulleys,*

Elevator Supplies.

*Hangers,
Boxes,
Gearing,
Belting,
Steel Conveyors,
Wood Conveyors,
Link Belt,
Sprocket Wheels,
Engines and Boilers,
Water Wheels,*



Three-Roll Two-Break Corn and Feed Mill.

TEN SIZES and STYLES of ROLLER, CORN and FEED MILLS.

No doubt about the volume of our voice if price and merit talk, and what we say will be interesting if you intend to buy.

Write Us Saying What You Want.

NORDYKE & MARMON CO., - INDIANAPOLIS, IND.

GASOLINE ENGINES.

Stationary & Portable

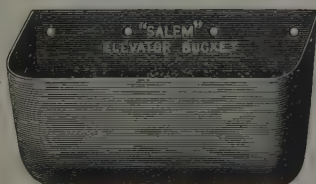
ALL SIZES.
Dwarfs in size and
Giants in Strength.
Costs only 10 cents a Day
per H. P. to run them, &
scarcely any attention.
EVERY ENGINE GUARANTEED

Write for particulars
and testimonials.

THE VANDUZEN GAS &
GASOLINE ENGINE CO.
CINCINNATI, O.

Mention this paper when you write.

NEVER A PEER



The Salem Bucket has had imitators, but never an equal. The most ever claimed by competing buckets is that they "are as good as the Salem."

We fixed the standard to which others aspired, but the Salem is now, as it always has been, incomparably the

BEST BUCKET MADE.

The BEST is what you want. It is the cheapest and most satisfactory in the end. Besides, the Salem is sold as low as other buckets.

ALL KINDS OF SHEET AND PLATE METAL WORK.

W. J. CLARK & CO., SALEM, OHIO, U. S. A.

DUST! DUST!



Gibbs' Patent Dust Protector protects the nose and mouth from inhalations of poisonous dust; invaluable in mills, elevators and every industry where dust is troublesome. Perfect protection with perfect ventilation. Nickel-plated protectors \$1, postpaid. Circulars free. Agents wanted.

Gibbs Respirator Co.,
80-86 La Salle Street, - CHICAGO.

American Elevator and Grain Trade.

- PUBLISHED BY -

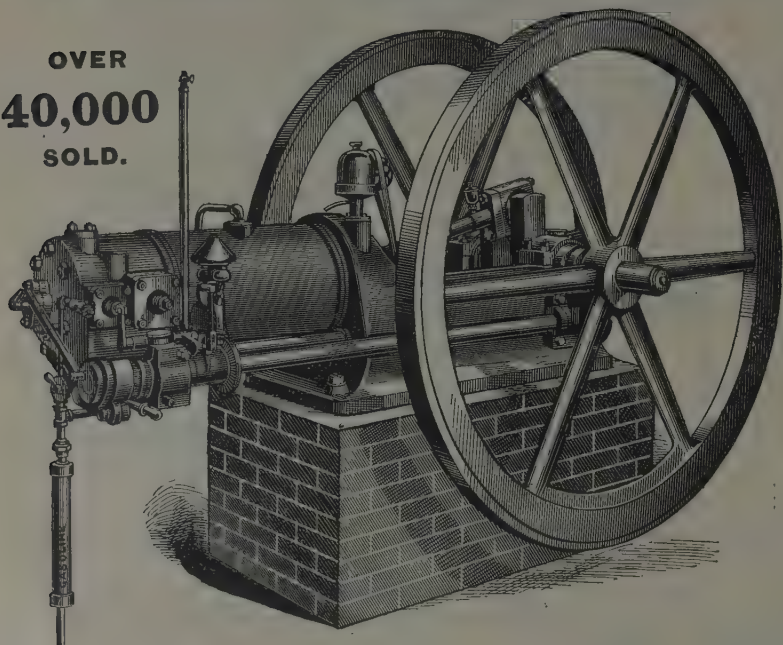
MITCHELL BROS. CO., CHICAGO.

\$1.00 PER ANNUM.

Subscribe for the American Elevator and Grain Trade and the American Miller; both one year \$2.50. Address MITCHELL BROS. CO., Chicago.

The Modern Wonder.

OVER
40,000
SOLD.



OTTO GASOLINE ENGINE

WORKING WITHOUT BOILER, STEAM, ENGINEER,
COAL, ASHES, OR DANGER.

2 Medals and 3 Diplomas at World's Columbian Exposition, making over 200 Medals and Diplomas in all.

Capacity of Works: 800 Engines per Year.
Sizes: 2 to 120 Horse-Power.

Best and Cheapest Power for GRAIN ELEVATORS,
FLOUR AND FEED MILLS, CONVEYORS, ETC.

OTTO GAS ENGINE WORKS,

OFFICES: Thirty-third and Walnut Sts., Philadelphia.
245 Lake St., Chicago.
35 E. Ohio St., Indianapolis.
321 S. 15th St., Omaha.

\$2.00



PUBLISHED THE FIRST DAY OF EVERY MONTH.

ESTABLISHED IN 1873.

The Best Exponent of Modern Milling.

SUBSCRIPTION PRICE,

\$2.00 PER YEAR.

Each number is worth the cost of an entire year's subscription to every man in the trade.

SEND FOR SAMPLE COPY.

ADDRESS,

\$2.50

— FOR —

BOTH

FOR ONE YEAR.

You can get such value nowhere else for your money. Many readers want a paper that comes twice a month. THE AMERICAN MILLER and THE ELEVATOR are offered at less than such a paper could be given for. You need them both in your business.

\$2.50

Two Papers a Month.

\$1.00



PUBLISHED THE FIFTEENTH OF EVERY MONTH

ESTABLISHED IN 1882.

Subscription Price, Only \$1.00 Per Year.

Each Number Contains 44 Pages of Valuable Matter.

THE AMERICAN ELEVATOR AND GRAIN TRADE is the only paper of its class in the field.

Mitchell Bros. Co.

PUBLISHERS,

184 & 186 Dearborn St., CHICAGO, ILL.



ROOFING

The Columbia Corrugating Manufg Co.

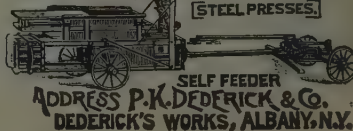
ADDRESS NILES, OHIO, CHICAGO, ILL.

Please mention this paper.

GET OUR
JOBBER'S
PRICES

ROLL & CAP STEEL.....
STANDING SEAM.....
V CRIMP.....
CORRUGATED IRON.....
STEEL BRICK SIDING..
STEEL CEILINGS.....
CONDUCTORS &c.....

FOR BEST HAY PRESSES



ADDRESS P.K. DEDERICK & CO.
DEDERICK'S WORKS, ALBANY, N.Y.

EUREKA



Grain Cleaning Machinery

THE GREATEST VARIETY
THE LARGEST CAPACITY
THE LARGEST NUMBER AT WORK } IN THE WORLD.

THE NEW IMPROVED *Eureka*

*BY Far the
Best Separator
on the Market.*

We make every part of this machine
under our own

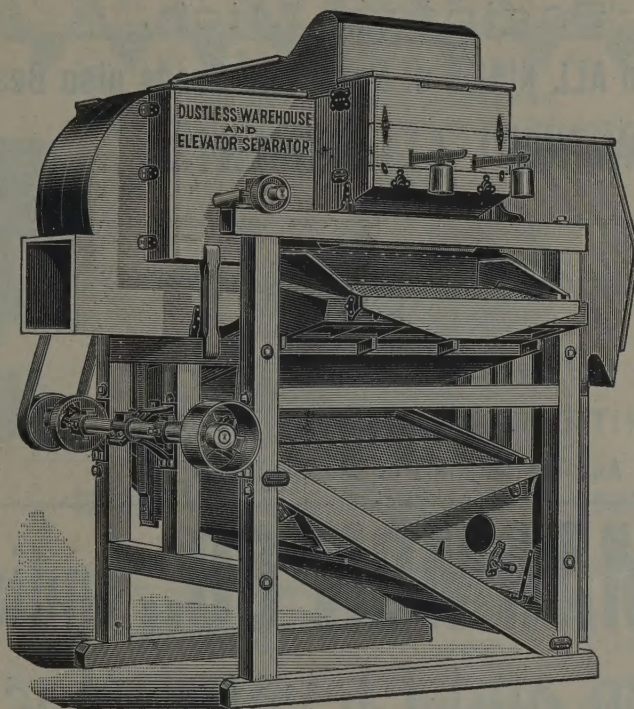
PERSONAL SUPERVISION,

and are thus in a position to guarantee
it as to material and workmanship.

Will positively do more and better
work than any other Separator.

Wide Suction.
Perfect Separation under Control.
Interchangeable Screens.
Large Cockle Screen.
Automatic Feed.

Will run perfectly smooth and quiet.
Has large capacity.



WILL SHIP ONE ON 30 DAYS' TRIAL.

*Warehouse
and
Elevator
Separator,*

WITH LATERAL-SHAKE
MOVEMENT
OF SCREENS.

Conceded by all to be the best arrangement for
ridding grain of impurities. Has Counter-balances
and new Pitman Drive.

READ WHAT USERS SAY OF THEM:

CLYDE, N. Y., May 21, 1894.

MR. S. HOWES, Silver Creek, N. Y.

DEAR SIR:—I enclose you check for \$ to
balance account for the Eureka Warehouse Separator.
I take pleasure in informing you that I am
much pleased with the machine, which has done
good work from the start.

Yours truly, GEO. B. GREENWAY.

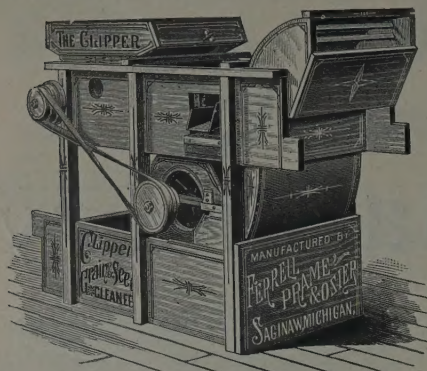
YORK, PA., July 18, 1894.

MR. S. HOWES, Silver Creek, N. Y.

DEAR SIR:—We are in receipt of your favor of
the 16th. The Warehouse and Elevator Separator
sold us by you is giving us great satisfaction. We
are not in the habit of recommending any ma-
chines, but must speak well of this one.

Yours truly, P. A. & S. SMALL.

Address **THE S. HOWES COMPANY, Silver Creek, N. Y.**
SOLE BUILDERS.

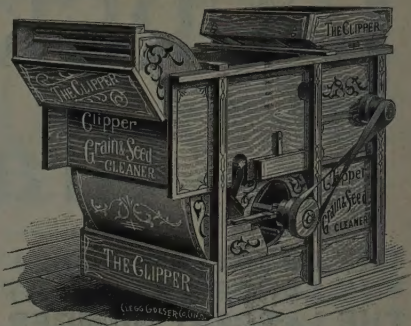


No. 1—For Grain and Seeds; for Hand Use.

THE CLIPPER

Grain, Seed and Bean

CLEANERS.



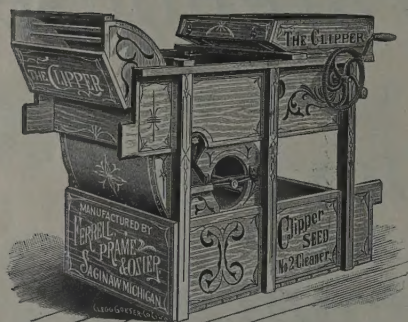
No. 5—Power Grain and Seed Cleaner.

MANUFACTURED BY

FERRELL, PRAME & OZIER,

Saginaw, Mich.

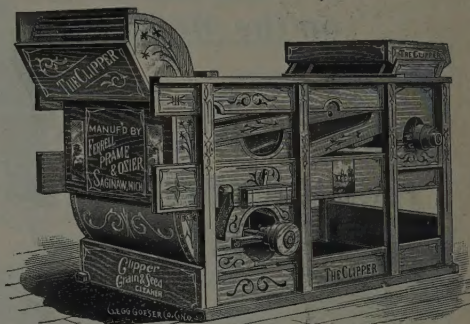
These Machines Clean ALL KINDS of Grain and Seeds also Beans PERFECTLY
WITHOUT ATTACHMENTS.



No. 2—Hand Seed Cleaner.

For Durability, Simplicity and Satisfactory
Work are Unsurpassed.

WRITE US FOR CATALOGUE
And Testimonials of Leading Firms.



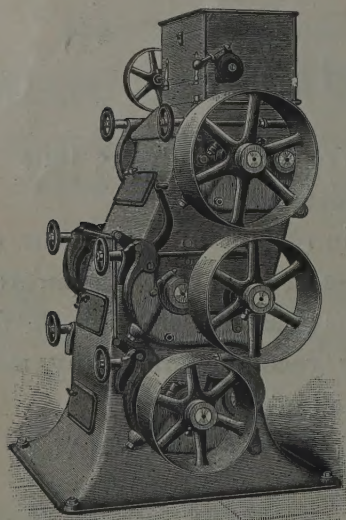
No. 10—Flax Cleaner.

NORDYKE & MARMON CO., Indianapolis, Ind.,

Flour, Corn and Elevator Machinery,

QUALITY TO SUIT THE MOST EXACTING.

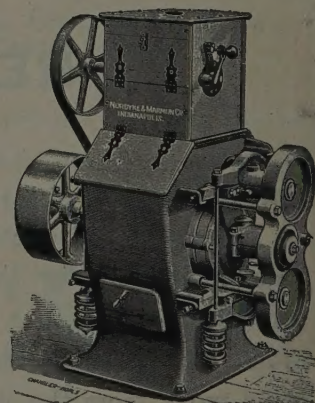
PRICES TO SUIT THE TIMES.



Three Pair High Six Roller Mill.

*Corn Shellers,
Grain Cleaners,
Flour and Bran Packers,
Flour Feeders and Mixers,
Portable Buhr Mills,
Hominy Mills,
Wheat Heaters,
Scales,
Shafting,
Pulleys,*

*Hangers,
Boxes,
Gearing,
Belting,
Steel Conveyors,
Wood Conveyors,
Link Belt,
Sprocket Wheels,
Engines and Boilers,
Water Wheels,
Elevator Supplies.*



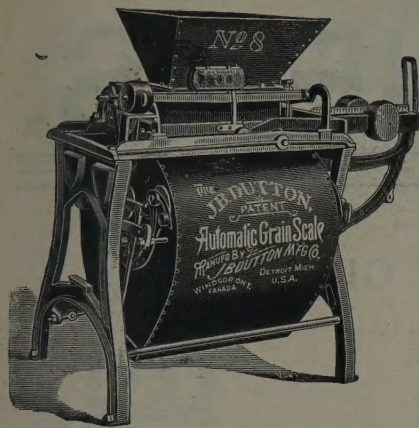
Three-Roll Two-Break Corn and Feed Mill.

TEN SIZES and STYLES of ROLLER, CORN and FEED MILLS.

No doubt about the volume of our voice if price and merit talk, and what we say will
be interesting if you intend to buy.

Write Us Saying What You Want.

NORDYKE & MARMON CO., - INDIANAPOLIS, IND.



J. B. DUTTON'S Patent Automatic Grain Scale,

FOR USE IN
ELEVATORS, DISTILLERIES, MALT HOUSES, FLOUR MILLS, ETC.

ACCURATE AND RELIABLE AT ALL TIMES.

SCALES SENT ON 30 DAYS' TRIAL

SEND FOR CIRCULAR AND PRICE LIST.

ADDRESS:

J. B. DUTTON, 1026 and 1028 Scotten Ave., DETROIT, MICH.

CONVEYING, ELEVATING,
AND
POWER TRANSMITTING
MACHINERY.



CALDWELL STEEL CONVEYOR.

Manufactured exclusively by us at Chicago, with latest improvements.

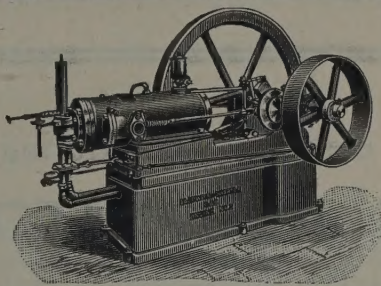
AUTOMATIC POWER GRAIN
SHOVELS.

SOUTH BEND WOOD SPLIT
PULLEYS.

H. W. CALDWELL & SON COMPANY,

127, 129, 131 and 133 W. Washington St.

CHICAGO, ILL.



SPROCKET WHEELS, LINK BELTING, ELE
VATOR BOOTS, BOLTS AND BUCKETS,
SHAFTING, BELTING, HANGERS,
PULLEYS, GEARS, CAR
PULLERS, ETC.

EVERY SEAMLESS STEEL
ELEVATOR BUCKETS.



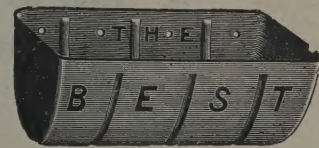
CALDWELL CHARTER GASOLINE AND GAS ENGINES.

2 TO 75 ACTUAL HORSE POWER.

These engines use gasoline from tanks lower than the engines. They are simple, reliable and safe. We build them substantially, of best material, and we know they are the best engines made.

PLEASE SEND FOR CATALOGUE.

CALDWELL CORRUGATED SEAMLESS
STEEL ELEVATOR BUCKETS.



AMERICAN MILLER.

PUBLISHED BY

MITCHELL BROS. CO., Chicago.

\$2.00 PER YEAR.

EAGLE BRAND THE BEST!

ROOFING

EAGLE BRAND THE BEST!

It is superior to any other roofing and unequaled for House, Barn, Factory or outbuildings; it costs half the price of shingles, tin or iron; it is ready for use and easily applied by anyone; it is the best roofing in the market, in durability, to all others. Send for estimate and state size of roofing.

SEND FOR SAMPLES.

RUBBER PAINT

NO TAR USED.

The best known paint in the world for tin, iron or shingle roofs, fences, sides of barns and outbuildings; it costs only 60 cents per gallon in barrel lots, or \$4.50 for a 5-gallon tub. Color, dark red. It will stop leaks in tin or iron roofs that will last for years. It is guaranteed not to peel, crack, scale nor wash off, and is fire-proof against sparks. **TRY IT.**

EXCELSIOR PAINT AND ROOFING CO.,

155 DUANE STREET, NEW YORK, N. Y.

An Offer to Hay and Grain Men.

THE AMERICAN ELEVATOR AND
GRAIN TRADE,

\$1.00 PER YEAR.

Monthly.

THE HAY TRADE JOURNAL AND
DIRECTORY,

\$2.00 PER YEAR.

Weekly.

BOTH FOR \$2.00.

ADDRESS EITHER

The Hay Trade Journal,
Canajoharie, N. Y.

OR

Mitchell Bros. Co.,
184 and 186 Dearborn St., Chicago, Ill.

JEFFREY

Roller Chains, Steel Drag,
Steel Cable and Special Chains

—FOR—
**ELEVATING
AND CONVEYING
MACHINERY**

FOR HANDLING MATERIAL OF ALL KINDS

**POWER TRANSMISSION
MACHINERY.**

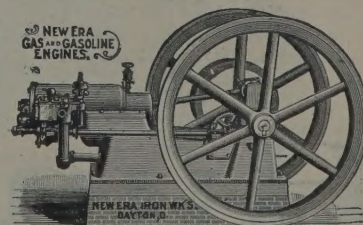
SHAFTING,
PULLEYS,
CLUTCHES,
BUCKETS,
BOOTS,
ROOTS.

**WIRE CABLE
CONVEYORS.**

For long and short
distance conveying.

THE JEFFREY MFG. CO. 163 Washington St.
Columbus, Ohio. NEW YORK.
Send for Catalogue.

GAS ENGINES



PERFECT POWER } Costing from 1/4 to 1 cent per
H. P. actually used per hour.

For full particulars, address:
NEW ERA IRON WORKS,
DAYTON, OHIO.

GRAIN CLEANERS.

IF YOU ARE IN NEED OF A PERFECT GRAIN
CLEANER, WE OFFER YOU

The Monitor Separator

These machines have stood the test and are pronounced by leading elevator operators superior to anything heretofore used. Their opinions are based on actual experience.

Nearly all of the leading cleaning elevators built during the last four years have adopted

THE MONITOR

They are simple yet perfect in construction and durable.

They do the maximum of work with the minimum of power.

They have a powerful but perfectly controlled air current.

They can be quickly adjusted to do any class of work desired.

They will give you grand satisfaction.

They are modern machines, and you will find them in all of the modern cleaning houses.

If you are interested in this line we ask you to investigate.

BARLEY.

We are making a special **BARLEY CLEANER**
that stands at the head.

FLAX.

Our **Monitor Flax Cleaner** will give you good
results. Close work with large capacity.

Huntley Mfg. Co.,

Successors to HUNTLEY, CRANSON & HAMMOND,

Silver Creek, N. Y.